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# PRINCETON REVIEW.

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By Whom, all things; for Whom, all things.

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FIFTY-FOURTH YEAR.

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JULY—DECEMBER.

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## EXPLORATION AS VERIFYING REVELATION.

THE Bible is not a revelation of abstract truth ; it is mainly a record of God's dealings with, and instructions to, his people. In it we have a history, sometimes of individuals, sometimes of families, sometimes of tribes and nations ; and we observe that in instructing and guiding them God did not, as a rule, remove them from their ordinary homes and spheres of duty. When he did remove them, it was because of some pressing necessity, and because, humanly speaking, their moral training and influence on the world for good required it. Usually he dealt with men as they lived ; and he was pleased to adapt his government and his instructions, whether providential or supernatural, to the circumstances in which they were placed for the time being.

Another marked characteristic of the Bible is the minuteness of its ethnographical and geographical details, and the clearness of its historic statements. The division of the original human family into nations and tribes ; the countries they colonized ; their subsequent migrations ; the cities they built, and the empires they founded, are given in the book of Genesis with a circumstantiality which, considering the remote age of the document, is altogether unparalleled. That book, in fact, especially the tenth chapter, forms the basis of the science of ethnology ; and the most recent and exhaustive researches in the languages, the monuments, and the records of antiquity, tend to establish its accuracy.

Then, again, we have in the concluding chapters of Genesis, and in the beginning of Exodus, some very graphic sketches of nomad life in Canaan and settled life in Egypt ; we have in the

remaining books of the Pentateuch topographical notes on the peninsula of Sinai, Edom, Moab, Ammon, and the old kingdoms of Sihon and Og east of the Jordan. The book of Joshua is the Domesday Book of Palestine, not only describing, with the fulness of a government survey, the various tribal boundaries throughout the land, but containing long lists of the towns and villages allotted to each tribe, in the order, as recent research has shown, of their geographical position. In the records of Kings and Chronicles, and the parallel fragments of history in the writings of the several prophets, we are brought into contact with other ancient nations and peoples—the Benekedem, the Arameans (Syrians) of Damascus, the Assyrians, the Babylonians, the Chaldeans, the Medes, the Persians ; and we have some vivid pictures of the power and conquests of their monarchs, and of the splendors of their courts. The book of Daniel is a life-sketch of the dazzling but transient glories of Babylon ; while Esther is an invaluable monograph on the Persian court of Susa. In the Gospels, the Acts of the Apostles, and some of St. Paul's Epistles, we observe the same geographical precision and strong local coloring. One can follow to this day, as the writer has done, the footsteps of Jesus over the mountains of Judah, along the banks of the Jordan, by the silent shores of the Sea of Galilee, marking, as he proceeds, those characteristics of each district, and of each class among the people, which suggested his beautiful parables and gave point to his illustrations and discourses. One can also follow the track of the great apostle of the Gentiles from country to country, and from city to city, by land and by sea, and observe at every stage of his journey the clear topographical details and the thoughtful and profound delineations of national character which leave on the Acts of the Apostles and the Epistles the indelible stamp of authenticity and genuineness.

Hence, in considering the evidences of the divine authority of the Bible, we ought never to forget that its fundamental doctrines are all, more or less, connected with and woven into the facts of history, and, in many instances, in such a way as that the proof of the reality of the facts recorded involves the truth of the doctrine. Nearly every great doctrine has been either developed in or illustrated by some historic event, upon

which we can as fully and as safely exercise the powers of our mind in eliciting and testing truth, as we can upon the facts of science. The Bible, as a revelation of dogma, has in this way been subjected to the scrutiny of historical criticism. It has been subjected to it in every age since the completion of the canon, but more especially within the past half-century, and though assailed with every weapon which ingenuity could invent or an exhaustive scholarship rake up, it has uniformly come forth, in the judgment of impartial men, triumphant.

Then, again, the Bible contains a series of prophecies, clear, detailed, in many cases most startling in their nature, and in some cases altogether improbable—many would say incredible. The future history and final doom of nations, countries, and cities are portrayed with singular clearness. No amount of political sagacity could have foreseen what is predicted ; no depth of philosophical speculation could have divined it ; no breadth of research could have discovered it ; and yet time has converted all those strange and varied and astounding prophecies of Jewish seers into facts which historians have recorded and travellers have witnessed.

In Scripture, *faith* is enjoined as the great requisite—the first duty of man. “Without faith it is impossible to please God.” But it is not a credulous or blind faith. Faith is the fruit of knowledge, not the offspring of ignorant credulity. The doctrines of Scripture which, in one sense, constitute the objects of our faith, are developed through the medium of facts which are exhibited openly before the eyes of men, coming within the range of observation and reason, and thus challenging investigation according to the principles of pure science. Faith and reason go hand in hand, because reason judges of the evidence on which faith rests. Every attempt made to undermine the basis of faith in the progressive development of all the forms and phases of human error, it is within the province and power of reason to meet and counteract.

Now, scepticism is progressive. In each succeeding age it assumes a new form ; but it so happens that the evidence of the facts on which faith rests is also progressive, and keeps pace, as it were, with the advance of scepticism. It would almost seem as if it had been so ordered in the councils of the Eternal, that

the new discoveries made in the fields of biblical research should be exactly suited to meet and counteract the new errors and objections of each successive age.

The main object of this article is to give a condensed summary of the leading results of the explorations and discoveries made in Bible lands during recent years, and to show how they are calculated to illustrate Bible history, and thus confirm our faith in divine revelation.

#### DISCOVERIES AT NINEVEH.

The story of Layard's wonderful discoveries at Nineveh thirty years ago took the world by surprise. It brought us face to face, as it were, with those monarchs whose conquests and cruelties, as narrated by the writers of the Old Testament, appeared to many to be in a large measure fabulous. On the Assyrian monuments one now sees depicted some of the very scenes mentioned in Scripture; while on the voluminous inscribed tablets he has ample details of the manners and customs, the wars and sports, the science and religion, of the primeval nations of Central Asia.

The researches of Layard were followed up by a number of able and enthusiastic scholars — Loftus, Botta, Rawlinson, Smith, and others. Traditions, legends, and historic annals have been exhumed illustrating, in a most remarkable manner, not merely those portions of Scripture in which the wars of the Assyrian and Babylonian kings are chronicled, but, strange to say, the very earliest narratives in the book of Genesis. Inscribed tablets, which have lain buried for two thousand five hundred years beneath desolate mounds on the plains of Assyria and Babylonia, contain, in a language until very recently unknown to scholars, accounts in some points substantially identical with the Mosaic narrative of the creation, the fall, and the deluge. The Bible represents those great plains as the home of our first parents, the site of Eden, the scene of the deluge and of the confusion of tongues, the birth-place of Israel, the centre from which the human race was dispersed, and the common nucleus of those mighty empires which for ages ruled the destinies of the world—Chaldea, Babylonia, Assyria, Media, and Persia.

The Record Chambers of Nineveh, recently discovered, have supplied documents, now being published, which confirm the biblical annals.

The vast mounds which were supposed to mark the sites of Nineveh, Babylon, Erech, Calneh, and other great cities were long known to oriental travellers; but it was not till the year 1842 that the work of excavation was begun. Then M. Botta, French consul at Mosul, commenced to excavate the mound of Kouyunjik, on the left bank of the Tigris. His discoveries were so remarkable that they immediately attracted the attention of Europe. In the mound of Khorsabad, ten miles farther north, he found the remains of the palace of Sargon, who ruled Assyria from B.C. 722 to B.C. 705, and who was the cotemporary of Hezekiah, King of Judah. The interior walls of the palace were covered with sculptures representing battles, sieges, chariots, hunting scenes, festive entertainments, huge winged bulls, figures of priests, kings, and gods—almost all of which had upon or around them long cuneiform inscriptions. Such of the sculptures and inscribed slabs as could be removed were conveyed to Paris, and now form a valuable part of the magnificent collection of antiquities in the Louvre. A splendid work was published, at the expense of the French Government, containing engravings of those monuments, and of others which were too much injured to admit of their being removed.

Botta was followed by Layard, who inaugurated his great work in 1845, under the patronage and at the expense of the English ambassador at Constantinople, Sir Stratford Canning, now Lord Stratford de Redcliffe. His success was complete. He speedily laid bare the palaces of Sardanapalus, Esarhaddon, and other Assyrian monarchs, in the mound of Nimrod, the site of the ancient Calah (Gen. 10:12); and the palace of Sennacherib at Kouyunjik, the ancient Nineveh—all of them containing remarkable sculptures and historical documents of inestimable value. In the palace of Sennacherib, Layard found a

"doorway, guarded by fish-gods (similar to the Philistine Dagon), which led into two small chambers opening into each other, and once panelled with bass-reliefs. On a few fragments, still standing against the walls, could be traced a city on the shores of a sea whose waters were covered with galleys. I shall call these chambers 'the chambers of records,' for, like 'the house of the

rolls,' or records, which Darius ordered to be searched for the decree of Cyrus, concerning the building of the temple of Jerusalem,<sup>1</sup> they appear to have contained the decrees of the Assyrian kings as well as the archives of the empire. . . . The historical records and public documents of the Assyrians were kept on tablets and cylinders of baked clay. On a large hexagonal cylinder, presented by me to the British Museum, are the chronicles of Esarhaddon; on a similar cylinder, discovered in the mound of Neby Yunus, are eight years of the annals of Sennacherib, and on a barrel-shaped cylinder in the British Museum, and known as Bellin6's, we have part of the records of the same king. The importance of such relics will be readily understood. They present, in a small compass, an abridgment or recapitulation of the inscriptions on the great monuments and palace walls, giving in a chronological series the events of each monarch's reign.

"The chambers I am describing appear to have been a depository in the palace of Nineveh for such documents. To the height of a foot or more from the floor they were entirely filled with them; some entire, but the greater part broken into many fragments. They were of different sizes; the largest tablets were flat, and measured about 9 inches by 6½; the smaller were slightly convex, and some were not more than an inch long, with but one or two lines of writing. The cuneiform characters on most of them were singularly sharp and well defined, but so minute in some instances as to be almost illegible without a magnifying-glass. These documents appear to be of various kinds. Many are historical records of wars and distant expeditions undertaken by the Assyrians; some seem to be royal decrees, and are stamped with the name of a king; others, again, contain lists of the gods."<sup>2</sup>

"Sir Henry Rawlinson, who made the preliminary examination of Mr. Layard's treasures, and who was the first to recognize their value, estimated the number of these fragments at over twenty thousand."<sup>3</sup> These precious tablets are now in the British Museum, accessible to all oriental scholars. The key to the cuneiform writing, with which they are covered, was discovered by Grotefend, but Sir Henry Rawlinson was the first to use it with success in deciphering inscriptions. The difficult and laborious task has since been prosecuted with great zeal by Hincks, Oppert, Norris, Fox Talbot, Lenormant, Sayce, Smith, and others;<sup>4</sup> and we are now only just beginning to realize the vast importance of those primeval records in a biblical and archæological point of view. Fortunately, too, they are being brought within the reach of the general public, for some of the more important tablets themselves have been published

<sup>1</sup> Ezra 6:1.

<sup>2</sup> Layard, "Nineveh and Babylon," p. 344 *et seq.*

<sup>3</sup> Smith, "Chaldean Account of Genesis," p. 2.

<sup>4</sup> Smith, "Assyrian Discoveries," p. 5.

by the authorities of the British Museum, and translations of them are appearing in volumes entitled "Records of the Past," issued under the sanction of the Society of Biblical Archæology, by the Messrs. Bagster, of London.

#### CHALDEAN ACCOUNT OF THE CREATION.

Amongst the most intensely interesting of the inscriptions are those which contain the Genesis legends. Notices of the creation were first observed by Smith on tablets in the British Museum when preparing one of the volumes of his cuneiform texts. Curiosity was at once awakened, and his search was diligently prosecuted in the Museum. Subsequently he went to Nineveh, and re-examined with new and special care the ancient Record Chambers. The success which rewarded his praiseworthy toil far surpassed expectations. He brought to light records which appear to have been copied by Assyrian scribes from Akkadian tablets, originally written several centuries before the time of Abraham. Each distinct subject was treated of in a series of tablets, and had a special title composed, as in the case of the Hebrew books of the Old Testament, of the first few words of the story. The number of each tablet in the series was written upon it; and it had besides a "catch-phrase" at the end, consisting of the first line of the following tablet. This arrangement greatly facilitates classification, and enables the scholar in some cases to identify even a small fragment. The existing documents, having been found in the ruined palaces of the Assyrian monarchs, cannot be later than B.C. 625, when Nineveh was destroyed; and they were copied from Akkadian documents of a far older date. Mr. Smith's words are worthy of note: "The Izzubar legends, containing the story of the flood, and what I believe to be the history of Nimrod, were probably written in the south of the country, and at least as early as B.C. 2000. These legends were, however, traditions before they were committed to writing, and were common in some form to all the country. The story of the creation and fall belongs to the upper or Akkad division of the country, and may not have been committed to writing so early as the Izzubar

legends ; but even this is of great antiquity.”<sup>1</sup> Thus the Assyrian tablets in their original form are at least two centuries older than Abraham, and six centuries older than Moses ; while the remarkable traditions they contain are more ancient still.

It is unfortunate that nearly all the tablets hitherto discovered are mere fragments. Some of them have been, after great labor, put together ; pieces of others have been exhumed from the mound of Kouyunjik ; and a careful examination of what remain has shown that the Record Chamber originally contained detailed legends of the creation, the fall, the deluge, the Tower of Babel, the confusion of tongues, and the dispersion of mankind, resembling in many particulars the Mosaic narrative.<sup>2</sup>

“The first series,” says Smith, “which I may call the story of ‘The Creation and Fall,’ when complete must have consisted of nine or ten tablets at least, and the history upon it is much longer and fuller than the corresponding account in the book of Genesis. . . . The narrative commences with a description of the period before the world was created, when there existed a chaos, or confusion. The desolate and empty state of the universe and the generation by chaos of monsters are vividly given. The chaos is presided over by a female power named Tisalat and Tiamat, corresponding to the Thalath of Berossus ; but, as it proceeds, the Assyrian account agrees rather with the Bible than with the short account from Berossus. We are told, in the inscriptions, of the fall of the celestial being who appears to correspond to Satan. In his ambition, he raises his hand against the sanctuary of the God of heaven ; and the description of him is really magnificent. . . . The rebellion leads to a war in heaven and the conquest of the powers of evil, the gods in due course creating the universe in stages, as in the Mosaic narrative, surveying each step of the work and pronouncing it good, the divine work culminating in the creation of man, who is made upright and free from evil, and endowed by the gods with the noble faculty of speech. The deity then delivers a long address to the newly-created being, instructing him in all his duties and privileges, and pointing out the glory of his state. But this condition of blessing does not last long before man, yielding to temptation, falls ; and the deity then pronounces upon him a terrible curse, invoking on his head all the evils which have since afflicted humanity.”<sup>3</sup>

Such is a summary of the Assyrian legend. A few extracts from the tablets themselves will show more clearly in what points they accord with the biblical narrative. It is unfortunate

<sup>1</sup> “Chaldean Account of Genesis,” p. 27.

<sup>2</sup> See, generally, Smith, “Assyrian Discoveries,” p. 166 *et seq.* ; “Chaldean Account of the Creation,” p. 3 *et seq.* ; “Records of the Past,” vols. i., iii., vii., and ix.

<sup>3</sup> Smith, “Chaldean Account of the Creation,” pp. 13-15.

that so comparatively small a portion of the original documents has been saved from the ruins, and that even those which do remain are so fragmentary, and in some places so obscure, that the exact sense can scarcely be absolutely fixed ; yet there is no doubt about their general tenor. The writing upon each tablet is on one column, extending over both the front and back, and contained about one hundred lines. Portions of the first and fifth tablets only of the series have been found and deciphered with any fair degree of certainty. We give extracts from the translation made by Mr. Fox Talbot :

*First Tablet.*

“When the upper region was not yet called heaven,  
 And the lower region was not yet called earth,  
 And the abyss of Hades had not yet opened its arms,  
 Then the chaos of waters gave birth to all of them,  
 And the waters were gathered into one place.  
 No men yet dwelt together ; no animals yet wandered about.”

The rest of the tablet refers to the gods, and is mutilated. The above extract corresponds in outline very remarkably with Genesis 1 : 1 and 2 : “ In the beginning God created the heaven and the earth. And the earth was without form and empty, and darkness was upon the face of the deep. And the Spirit of God hovered over the face of the waters.”

The fifth tablet is of very great importance. We give the following extract from the first part of it, which alone remains perfect :

“He constructed dwellings for the great gods,  
 He fixed up constellations, whose figures were like animals,  
 He made the year. Into four quarters he divided it.  
 Twelve months he established, with their constellations, three by three,  
 And for the days of the year he appointed festivals.

In the centre he placed luminaries.  
 The moon he appointed to rule the night  
 And to wander through the night, until the dawn of day.  
 Every month without fail he made holy assembly days.  
 In the beginning of the month, at the rising of the night,  
 It shot forth its horns to illuminate the heavens.  
 On the seventh day he appointed a holy day,  
 And to cease from all work he commanded.  
 Then arose the sun in the horizon of heaven.”<sup>1</sup>

<sup>1</sup> “ Records of the Past,” ix., 117.

This corresponds with the fourth day in the Mosaic narrative. The lights were to be for *signs*, for *seasons*, for *days*, and for *years*; the sun was to rule the day, the moon to rule the night. God made the stars also. It will be observed, too, that though this is the *fourth* day, it is the fifth stage in the work of creation; for the first stage is given in the first two verses of Genesis, and was long antecedent to the proper work of the first day. It would seem as if the events of each stage, or each day, in the Mosaic account had been embodied in a separate Assyrian tablet; for the first tablet, like the first two verses of Genesis, is introductory, stating simply the fact of creation at some period not named. Smith adopts this view, and says: "There is fair reason to suppose that there was a close agreement in subjects and order between the text of the Chaldean legend and Genesis, while there does not appear to be any thing like the same agreement between these inscriptions and the accounts transmitted to us through Berossus."<sup>1</sup> The tablets are many centuries older than Berossus, who flourished in B.C. 300; they therefore contain a purer because a more ancient tradition.

The last lines of the fifth tablet are intensely interesting, as containing probably the oldest monumental evidence of the institution of the Sabbath, and that, too, almost in the very words of Genesis. It is here affirmed, moreover, that the institution of the Sabbath was coeval with the creation. We find the same fact mentioned on other cuneiform inscriptions. In 1869 Smith discovered, among the Nineveh tablets, a religious calendar of the Assyrians, in which every month is divided into four weeks, and the seventh days, or "Sabbaths," are marked out as days on which no work should be undertaken.<sup>2</sup> It seems to be the same calendar a portion of which, translated by the Rev. A. H. Sayce, is published in "Records of the Past."<sup>3</sup> He says of it that

"It not only proves the existence of a Chaldean ritual and rubric, . . . but the chief interest attaching to it is due to the fact that it bears evidence to the existence of a seventh-day Sabbath, on which certain works were forbidden

<sup>1</sup> "Chaldean Account of Creation," p. 73.

<sup>2</sup> "Assyrian Discoveries," p. 12.

<sup>3</sup> Vol. vii., p. 157. The original text is given in the "Cuneiform Inscriptions of Western Asia," vol. iv.

to be done among the Babylonians and Assyrians. It will be observed that several of the regulations laid down are closely analogous to the sabbatical injunctions of the Levitical law and the practice of the rabbinical Jews. What I render 'Sabbath' is expressed by the Akkadian words, which literally signify 'dies nefastus,' and a bilingual syllabary makes them equivalent to the Assyrian *yum salumi*, or 'day of completion' (of labors). The word Sabbath itself was not unknown to the Assyrians, and occurs under the form *Sabattu*. . . . The calendar is written in Assyrian. The occurrence, however, of numerous Akkadian expressions and technical terms shows that it was of Akkadian and therefore non-Semitic origin, though borrowed by the Semites along with the rest of the old Turanian theology and science. The original text must accordingly have been inscribed at some period anterior to the seventeenth century B.C., when the Akkadian language seems to have become extinct."

I give here a translation of the rubric of the seventh day, which shows not only the existence of the Sabbath in those primeval times, but the mode in which it was kept:

"The seventh day. A feast of Merodach and Zir-Panitu—a festival.  
*A Sabbath.* The Prince of many nations  
The flesh of birds and cooked fruit eats not.  
The garments of his body he changes not. White robes he puts not on.  
Sacrifices he offers not. The king in his chariot rides not.  
In royal fashion he legislates not. A place of garrison the  
General (by word of) mouth appoints not.  
Medicine for his sickness of body he applies not.  
To make a *sacred spot* it is suitable.  
In the night in the presence of Merodach and Istar  
The king his offering makes. Sacrifices he offers.  
Raising his hand the high place of the god he worships."

The instructions given for the fourteenth, twenty-first, and twenty-eighth days, and each succeeding seventh day, are in substance and almost in language identical.

Smith found, in one of the trenches of Kouyunjik, another fragment of a tablet which he recognized as a part of one of the creation series, and the seventh in number. It is unfortunately much broken, but the general meaning is clear. The following is an extract from his translation:

"When the gods in their assembly had created . . . they caused to be living creatures . . . cattle of the field, beasts of the field, and creeping things of the field," etc.

The tablet thus corresponds to the sixth day, and the *seventh* stage, of the Mosaic account: "And God said, Let the earth

bring forth the living creature after his kind, cattle, and creeping thing, and beast of the earth," etc.<sup>1</sup>

Fragments of tablets have been discovered which are supposed to have contained an account of the creation of man, but so broken and mutilated that it is impossible as yet to give their meaning with any degree of certainty. It seems probable that one part of the inscription is a charge by the deity to the first woman on her duties, and another part may apply to both the newly-created pair; for we have the phrases: "Every day the God thou shalt approach—sacrifice, prayer of the mouth . . . to thy God in reverence thou shalt carry. Whatever shall be suitable for divinity, supplication, humility, and bowing of the face . . . thou shalt give to him, and thou shalt bring tribute, and in the fear of God thou shalt be holy."<sup>2</sup>

It will be observed that, so far as this fragment extends, it seems to inculcate monotheism, and to enjoin the worship of one true God on the newly-created being.

#### SATAN AND THE FALLEN ANGELS.

Another point of some importance we now proceed to consider. The silence of Scripture has been often observed. Nothing has been revealed in it which would merely tend to gratify a morbid curiosity; all its truths and historic statements have a great and good practical purpose. But, strange to say, on some of those points on which Scripture is silent the Assyrian records appear, partially at least, to fill up the blanks. Thus, in various parts of Scripture, allusions are made to fallen angels, of whom Satan was chief; but of the time, nature, and cause of their revolt and fall the Bible is silent. The fact of the fall is mentioned, and it seems to lie at the root of that most profound of all theological problems, the origin of evil; yet no solution, no explanation, is given. In that sublime passage in the book of Job,<sup>3</sup> where the Lord describes the creation of the material universe, he says, "The morning stars sang together, and all the sons of God shouted for joy." This implies that at the

<sup>1</sup> Smith, "Chaldean Account of Genesis," p. 76.

<sup>2</sup> Smith, "Chaldean Account of Genesis," p. 78 *et seq.*      <sup>3</sup> 38:7.

period referred to, whenever it was, there was perfect harmony and loyalty among all God's hosts. There were no rebels then in the universe. But a change took place to which Jude refers when he speaks of "the angels which kept not their first estate, but left their own habitation," and are consequently reserved of God "in everlasting chains under darkness unto the judgment of the great day."<sup>1</sup> We know, too, that the temptation of Satan, a fallen angel, was the cause of Adam's sin. Now, this wondrous revolution, which the Bible mentions but does not explain, is given with many details in one of the Assyrian tablets. The tablet represents the whole hosts of heaven as assembled, apparently at the time of the creation, and engaged in celebrating the praises of their Creator. Suddenly, from some unexplained cause, there was a shout of derision, followed by a revolt on the part of a number. The hymns of praise ceased, and God in his wrath drove the rebel angels from his presence, never to return. The words are beautiful and striking :

"The Divine Being spoke three times, the commencement of a psalm.  
 The God of holy songs, Lord of religion and worship,  
 Seated a thousand singers and musicians ; and established a choral band  
 Who to his hymn were to respond in multitudes. . . .  
 With a loud cry of contempt they broke up his holy song,  
 Spoiling, confusing, confounding his hymn of praise.  
 The God of the bright crown with a wish to summon his adherents  
 Sounded a trumpet-blast which would wake the dead,  
 Which to those rebel angels prohibited return,  
 He stopped the service and sent them to the gods who were his enemies.  
*In their room he created mankind.*  
 The first who received life dwelt along with him.  
 May he give him strength never to neglect his word,  
*Following the serpent's voice whom his hands had made.*"<sup>2</sup>

Several things are here specially deserving of note as illustrating Scripture : 1. The casting of the angels out of heaven for rebellion may be compared with that mystic passage in the book of Revelation which represents Michael and his angels fighting against the *dragon* and his angels, till Satan "was cast out into the earth, and his angels were cast out with him ;"<sup>3</sup> and also the statement of Peter that Satan was "cast into hell,"

<sup>1</sup> Jude 6 ; cf. Rev. 12:7-11 ; 2 Pet. 2:4.

<sup>2</sup> "Records of the Past," vii., 127.

<sup>3</sup> Rev. 12:7, 9.

and that singular declaration of our Lord, "I beheld Satan, like lightning, fall from heaven."<sup>1</sup> There is an obscure passage also in which pride would seem to be represented as the cause of Satan's sin and fall, "lest being lifted up by pride he fall into the condemnation (*κρίμα*) of the devil."<sup>2</sup> 2. The assertion that man was created in the room of the fallen angels may be connected with Satan's continuous enmity to man, from his creation downwards. Especially in the story of Job, Satan's malice and envy are permitted to have free scope, both in accusation and in practical operation. Then, in the bitter and persevering temptation of our Lord, man's great Representative and Deliverer. 3. The tablet mentions "*the serpent's voice*" as the agent in temptation. This is very striking in two ways—in connection with the actual temptation of Eve by the Serpent's false words, and the fact that Satan is called emphatically "*the crooked serpent*,"<sup>3</sup> and "*that old serpent, the Devil, and Satan*."<sup>4</sup>

#### CHALDEAN LEGEND OF THE FALL OF MAN.

Another of the series of Assyrian tablets contains an account of the fall of man into sin. It is unfortunately a mere fragment, so that the full narrative cannot be discovered; and the language is in places more than usually obscure, yet enough remains to show a few leading truths. Man is spoken of as pure and holy when created: "He made man, the breath of life was in him. . . . The doing of evil shall not come out of him, established in the company of the gods he rejoiceth their heart."<sup>5</sup> But a change came: "The dragon Tiamat tempted him. . . . The god Hea heard and was angry, because his man had corrupted his purity." Then a curse is pronounced: "May he be conquered, and *at once* cut off." This recalls the words in Genesis: "*In the day* that thou eatest thereof thou shalt surely die." These words follow: "Wisdom and knowledge hostilely may they injure him," and they seem to be singularly at one with the Mosaic statement that the substance of Satan's

<sup>1</sup> Luke 10:18.

<sup>2</sup> 1 Tim. 3:6.

<sup>3</sup> Job 26:13; Isaiah 27:1.

<sup>4</sup> Rev. 12:9.

<sup>5</sup> Smith, "Chaldean Account of Genesis," pp. 81-83.

temptation was to eat of the tree of knowledge, and his promise was, " ye shall be as God, knowing good and evil." It is further affirmed in the tablet that man would labor, but would not enjoy the fruits of it ; and that he would have much trouble. The records on the tablets are supplemented by pictorial representations on seals, on cylinders, and on slabs of stone. The sacred tree is often figured with the man beside it and the serpent behind him ; and also, strange to say, the sacred tree with the guarding cherubim on each side,<sup>1</sup> as described in Genesis.

#### THE CHALDEAN ACCOUNT OF THE DELUGE.

Next in chronological order among those remarkable Assyrian records is the Chaldean account of the deluge, contained on the eleventh tablet of the famous Izdubar series mentioned by Smith. Izdubar has been identified with the biblical Nimrod ; and it is a singular fact that the traditional record of his life and acts was originally deposited, and long preserved, in Erech, one of the cities which he founded,<sup>2</sup> so that it must have been written at least as early as the time of Abraham.

The Izdubar series are twelve in number. They narrate the early life and hunting exploits of the hero ; and then, after many details of love and war, an account is given of his wanderings in search of an ancestor who, for distinguished piety, had been taken into the society of the gods. The name of this ancestor was Hasiadra, and he seems to be identical with Noah ; though, from the reference to his translation, the old Akkadian chronicler may have confounded him with Enoch.

Izdubar at length found Hasiadra, and asked him how he became immortal. In reply Hasiadra told him the story of the deluge, which is given in the form of a mythological poem. Its close resemblance in many of its details to the Mosaic narrative is very striking. It represents the deluge as a punishment for the grievous sin of man. The god of the legend says, " Make a ship after this (for) I destroy the sinner and life. . . . Cause to ascend in the seed of life all of it, to the midst of the ship." Then the dimensions are given, but the numbers are

<sup>1</sup> Smith, "Chaldean Account of Genesis," pp. 89, 91.

<sup>2</sup> Gen. 10:10.

unfortunately gone: "The ship thou shalt make . . . cubits shall be the measure of its length, and . . . cubits the amount of its breadth and its height." The mode of building the ship is stated: "Its interior I examined . . . planks against the waters within it I placed. I saw rents and the wanting parts I added. Three measures of bitumen I poured over the inside; three measures of bitumen I poured over the outside." The agreement here with the words of the Bible is very remarkable: "Thou shalt pitch it within and without with pitch."<sup>1</sup>

The record describes the entry into the ship of the man and his family, and all the beasts of the field, their being shut in, and the coming of the flood: "Enter and the door of the ship turn (shut?). Into the midst of it thy grain and thy furniture and thy goods, thy wealth, thy women-servants, thy female slaves and the young men, the beasts of the field, and the animals of the field—all I will gather and I will send to thee, and they shall be enclosed in thy door." These instructions are almost substantially identical with those given to Noah and recorded in Gen. 6:18-21. Then, as in Genesis, the details are repeated when Hasiadra obeys: "I caused to go up into the ship all my male servants and my female servants, the beast of the field, the animal of the field, the sons of the people, all of them I caused to go up. A flood Shamas made, and he spake, saying, In the night I will cause it to rain from heaven. Enter to the midst of the ship and shut thy door. A flood he raised, and he spake, saying, In the night I will cause it to rain from heaven heavily," etc. The effects of the flood are next given: "The spirits carried destruction, in their glory they swept the earth; of VUL the flood reached to heaven. The bright earth to a waste was turned. . . . It destroyed all life from the face of the earth . . . the strong deluge over the people reached to heaven." Its close is told with equal clearness: "Six days and nights passed, the wind, deluge, and storm overwhelmed. On the seventh day in its course was calmed the storm, and all the deluge, which had destroyed like an earthquake, quieted. . . . I opened

<sup>1</sup> Gen. 6:14.

the window. . . . To the country of Nizir went the ship ; the mountain of Nizir stopped the ship. . . . On the seventh day *I sent forth a dove and it left.* The dove went and turned, and a resting-place it did not find, *and it returned.* I sent forth a swallow and it left. . . . A resting-place it did not find, and it returned. *I sent forth a raven,* and it left. The raven went, and the corpses on the water it saw, and it did eat, it swam, and wandered away and *did not return.*"

Some details are here given almost in the words of the biblical narrative. The following points may be specially noted : "The ark rested . . . on the mountains of Ararat. . . . Noah opened the window of the ark which he had made : and he sent forth a raven, which went to and fro, until the waters were dried up from off the earth. Also he sent forth a dove from him. . . . But the dove found no rest for the sole of her foot, and she returned unto him into the ark. And he stayed yet other seven days ; and again he sent forth the dove out of the ark," etc.<sup>1</sup>

At length Hasiadra left the ark, built an altar on the top of the mountain, and offered sacrifices and oblations of wine to the gods, who were propitiated. One other point of resemblance between the records and Genesis is of special importance, though somewhat obscurely stated in the former. Moses tells of the covenant which God graciously made with man not again to destroy the earth with a flood, and of the rainbow as a sign. The tablet also mentions a covenant. According to it, *Elu* (doubtless the *El* or *Elohim* of the Bible) was the god of vengeance, who brought on the deluge. Another god called *Hea* interceded for man, and besought *Elu* to punish sin in future by famine and pestilence, and by the ravages of wild beasts ; to this *Elu* agreed, and taking man from the ark, removed him to a place of safety.<sup>2</sup>

#### THE TOWER OF BABEL AND CONFUSION OF TONGUES.

Following down the stream of early Old Testament history, the next event which powerfully arrests the attention of the

<sup>1</sup> Gen. 8:4-11.

<sup>2</sup> The whole tablet is given in "Records of the Past," vii., 133 *et seq.*

student is the building of the Tower of Babel and the confusion of tongues. It was so wonderful in itself, and produced such an effect on the whole human race, that, if it was a fact and not a myth, one would expect its leading incidents to be preserved with great tenacity in primeval traditions. And such is the case. The narrative in Genesis is brief but graphic, and it contains a number of striking particulars—such as building with brick; the use of bitumen for mortar; the site of the tower, the plain of *Shinar*; the name of the place, *Babel*, “confusion;” and the dispersion of mankind from that central region. The ruins of the city, afterwards so celebrated as Babylon, still exist, and the massive remains of the brick “tower” may be seen near it. The modern Arab calls it *Birs Nimrûd*, “The Tower of Nimrod,” probably getting the name from a very ancient tradition which we shall mention presently; and the old Greeks named it *Bar-sippa*, “Tongue Tower,” which is equivalent to the Hebrew *Babel*, and derived from the “confusion of tongues.” In the Bible, “the city and the tower” are mentioned as two distinct structures;<sup>1</sup> and their ruins are still distinct, the *Birs-Nimrûd* being a few miles south-west of Babylon.

Several years ago, a cuneiform inscription was discovered by M. Oppert containing an account of the reconstruction of the Tower of Babel by Nebuchadnezzar, and the truth of the narrative is confirmed by the fact that bricks stamped with his name are found among the ruins. In the inscription, Nebuchadnezzar is represented as the speaker: “The tower, the eternal house which I founded and built. . . . *The first*, which is the house of the earth’s base, the most ancient monument of Babylon, I built and finished it. I have highly exalted its head with bricks covered with copper. We say for *the other*, that is, this edifice, the house of the seven lights of the earth, the most ancient monument of Barsippa. A former king built it, they reckon forty-two ages, but he did not complete its head. Since a remote time people had abandoned it, *without order expressing their words*. . . . I did not change the site, nor did I take away the foundation. . . . I set my hand to finish

<sup>1</sup> Gen. 11:4, 5.

it, and to exalt its head. As it had been in former times, so I founded it, I made it. As it had been in ancient days, so I exalted its summit.”<sup>1</sup>

Such is the testimony as to the Tower of Babel, given on an inscription of the age of Nebuchadnezzar (B.C. 625). But we have a still earlier record. On a fragment of a tablet found by the late Mr. Smith among the ruins of Nineveh is the story of the first erection of the tower. Though it is greatly mutilated, yet we can gather from its broken sentences the general outline of events. “(The thoughts) of his (man’s) heart were evil. . . . The father of all the gods he turned from . . . Babylon corruptly to sin went and small and great mingled on the mound. . . . Their work all day they founded; to their stronghold in the night entirely an end he made. In his anger also the secret counsel he poured out, *to scatter* (abroad) his face he set; he gave a command *to make strange their speech* . . . their progress he impeded . . .”<sup>2</sup>

We note a striking agreement between this fragment and the narrative in Genesis: “The Lord said, Behold the people is one, and they have all one lip. . . . Let us go down, and there confound their lip. And the Lord scattered them abroad thence upon the face of all the land; and they left off to build the city. Therefore was the name of it called Babel.”<sup>3</sup> The points of agreement are: The sin of the people; their uniting to build a tower; the anger of God; he confounds their speech; the building is abandoned; the people are scattered.

Babylon was thus abandoned, and it remained so for a time; but its history is again taken up in the Assyrian records, just as it is in the Bible.

#### NIMROD THE MIGHTY HUNTER.

In the genealogy of nations given in Genesis 10, it is said that “Nimrod began to be a mighty one in the earth. He was a mighty hunter before the Lord. . . . And the beginning of his kingdom was *Babel*, and *Erech*, and *Accad* (Akkad), and *Calneh*, in the land of *Shinar*.”<sup>4</sup> It is here indicated that

<sup>1</sup> Rule, “Oriental Records, Monumental,” p. 35.

<sup>2</sup> “Records of the Past,” vii., 131.

<sup>3</sup> Gen. 11:1, 6, 7.

<sup>4</sup> Gen. 10:8-10.

Nimrod was one of the first potentates in the world. He was mighty in the chase, and he was the founder of an empire, and also of four cities, the first being *Babel*. It was perhaps characteristic of his bold and daring nature that he should select for his capital the very spot which God had marked with his displeasure not long before. Some have thought that Nimrod was himself the instigator to that impious act which led to the confusion of tongues ; but this does not appear from the biblical narrative, though it may have been so. From the time of Nimrod, the history of Babylon is a blank in Scripture for twelve centuries. It is evident, however, from incidental statements in Job and Joshua,<sup>1</sup> that it still existed. It came again into notice at the time of the captivity of the ten tribes,<sup>2</sup> and during the reign of Hezekiah, and afterwards in the time of Manasseh, when it was made by Esarhaddon the capital of an independent kingdom ;<sup>3</sup> but it attained its greatest pitch of power during the reign of Nebuchadnezzar.

Now, among the most remarkable tablets discovered at Nineveh is the series which contains the legends of Izdubar. This name, be it noted, is only provisional, because the true phonetic value of the letters which represent it is not yet fixed. Smith says, " My own conviction is that when the phonetic reading of the characters is found, it will turn out to correspond with the name Nimrod. I have already evidence for applying this reading to the characters, but it is impossible to give the proofs in a popular work like the present." <sup>4</sup> Smith states the grounds on which he was led to identify Izdubar with Nimrod. My opinion " was first founded on the discovery that he formed the centre of the national historical poetry, and was the hero of Babylonian cuneiform history, just as Nimrod is stated to have been in the later traditions. I subsequently found that he agreed exactly in character with Nimrod ; he was a giant hunter, according to the cuneiform legends, who contended with and destroyed the lion, tiger, leopard, and wild bull, or buffalo, animals the most formidable in the chase in any country. He ruled first in Babylonia over the region which from other sources we know to have been the centre of Nimrod's kingdom. He

<sup>1</sup> Job 1:17; Josh. 7:21.

<sup>2</sup> 2 Kings 20:12 *et seq.*

<sup>3</sup> 2 Kings 17:24, 30.

<sup>4</sup> "Chaldean Account of Genesis," p. 182.

extended his dominion to the Armenian mountains, the boundary of his late conquests according to tradition, and one principal scene of his exploits and triumphs was the city of Erech, which, according to Genesis, was the second capital of Nimrod.<sup>1</sup> The centre of Izdubar's empire was in the region of Shinar, and the chief cities which he founded were Babel, Akkad, Erech, and Nipur; thus agreeing exactly with the biblical story of Nimrod, for it can be shown that Nipur was another name of Calneh.<sup>2</sup>

It is also an important fact that while the Assyrians and later Babylonians spoke a Semitic language, the most ancient inscriptions discovered in the region of Babylonia show that the earliest inhabitants of the great cities there founded spoke a Turanian or Cushite tongue. This agrees with the Mosaic statement that Nimrod, the founder of Babel and Erech, was a son of Cush. That dialect of the Turanian which was used in primeval Babylonia is called Akkadian, and a penitential psalm written in it is among the cuneiform texts recently published. It has an interlineary translation in Assyrian, and Mr. Sayce says its composition must be dated anterior to the seventeenth century B.C.<sup>3</sup>

The Akkadians were Hamites who inhabited Babylonia in prehistoric times, and were connected with the nomad races both on the north and south, in Africa and Asia. They were among the first to practise the art of writing, and they were from the earliest period devoted to the study of astronomy and the occult sciences. In their primitive tongue were preserved all the scientific, theological, and mythical records of Babylonia. They seem to be identical with the Chaldeans (Hebrew, *Kasdim*) of the Bible, one of whose chief seats was Ur,<sup>4</sup> and who were instruments, simultaneously with the Sabeans, in the affliction of Job.<sup>5</sup> In later times the name Chaldean was applied to the learned, and the language of the Chaldeans was that through which scientific and religious education was given. For this reason the prophet Daniel himself was made "master of the magicians, astrologers, *Chaldeans*, and soothsayers" in Babylon.<sup>6</sup> Semitic tribes invaded Chaldea and Babylonia at an early

<sup>1</sup> "Chaldean Account of Genesis," p. 181.

<sup>2</sup> Gen. 10:8-10.

<sup>3</sup> "Records of the Past," vii., 151.

<sup>4</sup> Gen. 11:28.

<sup>5</sup> Job 1:15-17.

<sup>6</sup> See Dan. 1:4; 5:11, 12.

period. At first they seem to have lived side by side with the Cushites, as is evidenced in the case of Abraham's family. They founded the Assyrian empire about the thirteenth century B.C., and being a people of literary tastes, they wished to obtain possession of the literary treasures which the Akkadians had accumulated in their great cities. They therefore, while retaining their Semitic tongue, adopted the cuneiform characters, and transcribed the Akkadian records, translating some, and adding such glosses to others as made them intelligible, to those at least who devoted themselves to literary studies. During the reign of Assur-banipal (B.C. 668-626), vast numbers of those early historical tablets were copied from the originals in the libraries of Erech and Babylon, and systematically arranged in the Royal Library at Nineveh. The collection thus formed was perhaps the most extensive ever made by royal munificence. It was, of course, involved in the destruction of Nineveh, which occurred only one year after the death of Assur-banipal, and the shattered tablets have lain buried beneath the ruins till the present age.

Recent research has been singularly successful in another way: it has discovered the sites and remains of the ancient cities of Erech, Akkad, and Calneh. They are vast mounds of brick, scathed by fire, and left bare and desolate by the action of the elements for more than two thousand years. Their names have been seen in inscriptions upon the earliest monuments, and upon tablets and cylinders found amid the ruins of Nineveh and Babylon. Akkad, which probably gave its name to the Akkadian tribe of Cushites, was a city famous for its science, especially astronomy. It may have been a school of Chaldean learning. Mr. Smith discovered a cuneiform tablet at Nineveh containing the answer of a Babylonian astronomer to questions from the king concerning two eclipses: "Concerning the eclipse of the moon about which the king my lord sent to me, I have made observations in the cities of Akkad, Barsippa (Babel), and Nipur (Calneh)."<sup>1</sup>

It will be observed that while these remarkable records bear in many respects a close resemblance to the Mosaic narrative,

<sup>1</sup> Rule, "Oriental Records, Monumental," p. 45.

and contain minute details strikingly illustrative of the truth of that narrative, there is at the same time such a wide dissimilarity on other points that there could have been no collusion. The Assyrian records bear the unmistakable characteristics of mythical poems, embellished, as was the custom in the East, with fanciful miraculous accompaniments. Yet, while such is the case, they are much nearer the biblical story than the later legends of Berosus, himself a Babylonian priest ; and they are widely different from the absurd myths of India and China, most of which are outrages upon common-sense and reason. The tablets represent traditional memorials of great facts, handed down from primeval ages, but which had not yet been greatly perverted by designing men. These facts were laid hold of by poets, who, after the manner of Dante and Milton, surrounded them with a halo of romance.

The chief value and interest of those Assyrian records consist in the fact that we have in them legendary accounts of the creation, the fall, the deluge, the confusion of tongues, originally written by a people distinct from the Hebrews, and in a language generically different from the Hebrew, centuries before the time of Moses, and even before Abraham left his native Ur ; and preserved to our own day in that very country which was the scene of those wonderful events. There was no collusion here ; there could have been none, for Moses had no intercourse with Babylonia. His training was Egyptian, where, as we shall afterwards see, another and scarcely less interesting class of early documents has been preserved. On comparing the book of Genesis with the Assyrian tablets, it is seen that the clear historic statements in the one and the exaggerated poetic legends in the other are all fixed to one locality—the Euphrates valley, and to cities whose names are given in each, and the ruins of which still exist.

The monuments of Assyria and Babylonia also corroborate in a most singular manner the legends on the tablets and the narratives in Genesis. In the very earliest sculptures on cylinders, and on the slabs which once lined the chambers of palaces, we find representations of the tree of knowledge, the serpent tempter, the tree of life guarded by cherubim, the ark, the hunting exploits of Nimrod, and many other things, which show

how thoroughly imbued the minds of the ancient Babylonians and Assyrians were with the whole facts recorded in the early chapters of the Bible.<sup>1</sup>

#### UR OF THE CHALDEES.

One of the most ancient cities of the Akkadians, or Chaldees, was Ur, the birth-place of the patriarch Abraham. It appears from several incidental statements in the Bible that the people were idolatrous, and in fact were so confirmed in their superstitious practices that Abraham, by divine command, left the city altogether, and migrated first to Haran, in Northern Mesopotamia, and then to Canaan. So Joshua told the Israelites in his speech at Shechem : " Thus saith the Lord God of Israel, your fathers dwelt on the other side of the flood in old time, even Terah, the father of Abraham, and the father of Nachor ; and they served other gods."

The site of Ur, after remaining unknown for ages, was discovered about twenty years ago. It is marked by a number of large mounds, which appear as if they had been scathed by fire. They were opened by the late Mr. Loftus, and he found embedded in them cylinders and bricks of the oldest type, showing, according to Sir Henry Rawlinson, that this was one of the earliest, if not the very earliest, cities built by the Cushite Akkadians. The bricks, and other inscribed tablets, bear the names of a series of kings extending from Uruk (B.C. 2230) to Nabonidas (B.C. 540). One inscription is as follows : " Orchanus (or Uruk), King of Ur, is he who hath built the temple of the moon-god." On a small tablet of black stone, also found at Ur, and now in the Louvre, is the following : " To the goddess Nana, lady of the temple of heaven, Dungi, man of might, king of the land of Ur, king over the country of Akkad, the temple I have founded."<sup>2</sup> The word *Ur* signifies " fire," or " light," and the names of ancient cities were generally descriptive, and very often they were taken from some deity to whose worship the city was dedicated. The Chaldeans were

<sup>1</sup> See Layard, " Nineveh and Babylon ;" Smith, " Chaldean Account of Genesis ;" Rawlinson, " Ancient Monarchies."

<sup>2</sup> *Revue Archéologique*, February, 1873.

fire-worshippers, and Ur appears to have contained one of their chief temples, which, at a somewhat later period, was dedicated to the moon, the second great "light" of heaven. Rufinus says that Chaldean priests were accustomed to carry their sacred fire with them to combat other gods. The city of Ur was afterwards called *Kamarine*, which doubtless comes from the Arabic word *Kamr*, "the moon."<sup>1</sup>

In Ur, and among the ruins of other early Chaldean cities, multitudes of bricks have been found, stamped with the name *Uruk*, which may perhaps be identical with the Arioch of Genesis 14:1, and the Orchanus of classic authors. This king was a noted builder, and founded many of the oldest temples in Babylonia, as appears from the fact that his name is upon the bricks dug up from their ruins, and also upon tablets. One inscription reads: "Uruk, king of Ur, who the house of Ur built." On a cylinder of Nabonidas (B.C. 555) is the following: "Bit Saresir, the tower of Bit-nergal which is in Ur, which Uruk the very ancient king had built." He, as has been stated above, built the temple of the moon at Ur; he also built the temple of the sun at Larsa (the Ellasar of Genesis 14:1); the temple of Venus at Erech; the temples of Bel and Beltis at Nipur (Calneh); and the temple of Sarili at Zirgulla.<sup>2</sup> These facts, while they show the all-pervading and inveterate idolatry of the ancient Chaldeans, strikingly illustrate the reason assigned by Joshua for the migration of Terah and his family from Ur. Had he remained there, he and his household would have been exposed to unceasing persecution and temptation. To have adopted the worship of the true God and renounced idolatry would have been, humanly speaking, impossible in such a country and among such a people. Their worship, as stated in the inscriptions shown on their monuments, was grossly polytheistic. "Various deities divided the allegiance of the people, and even of the kings, who regarded with equal respect, and glorified with equally exalted epithets, some fifteen or sixteen personages. Next to these principal gods were a far more numerous assemblage of inferior or secondary divinities, less often mentioned, and regarded as less worthy of honor, but still recognized

<sup>1</sup> Eusebius, "Praep. Evang.," ix., 7.

<sup>2</sup> "Records of the Past," iii., 9 *et seq.*

generally through the country. Finally, the pantheon contained a host of mere local gods and genii, every town and almost every village in Babylonia being under the protection of its own particular divinity."<sup>1</sup> All this shows the difficulties with which Abraham and the other patriarchs had to contend in eradicating idolatry from among their children and dependants. Rachel, before leaving Haran, stole her father Laban's gods,<sup>2</sup> and carried them with her to Canaan ; and when Jacob arrived at Bethel on his way from Padan-aram, he set up an altar to the true God, and said to his household and servants, " Put away the strange gods that are among you."<sup>3</sup>

It is worthy of note that one of their chief deities was *Hea*, the god of the sea and earth, the god of wisdom and teacher of mankind. He was represented by several emblems, such as the "arrow-head," which seems to point him out as the inventor of writing, because the arrow-head is the essential element of cuneiform writing ; and the "serpent," which appears so frequently upon Babylonian and Assyrian sculptures. It is emblematic of superhuman knowledge—a record of the primeval belief that "the serpent was more subtle than any beast of the field."<sup>4</sup>

The explorations on the side of Ur have brought to light other most interesting facts bearing upon the later history of Babylonia. Loftus says, "The cylinder inscriptions of Mugeier (Ur) are invaluable documents in confirming the authenticity and truth of Scripture. They not only inform us that Nabonidas, last king of Babylon, repaired the great temple of the moon at Hur, but they also explain who Belshazzar was, concerning whom the early Bible critics have in vain endeavored to reconcile conflicting statements. In the book of Daniel (5: 30), he is alluded to as the king of the Chaldees when Babylon was taken by the united armies of the Medes and Persians. The account of Berosus does not, however, agree with that of Scripture. It states that Nabonidas, after being utterly routed in the open plains by Cyrus, shut himself up in the city of Barsippa, but was soon obliged to surrender his person to the

<sup>1</sup> Rawlinson, "Ancient Monarchies," i., 138, 139.

<sup>2</sup> Gen. 31: 19.

<sup>3</sup> Gen. 35: 2.

<sup>4</sup> Rawlinson, "Ancient Monarchies," i., 154.

conqueror. From Daniel, therefore, we are led to conclude that Belshazzar was the last Chaldean monarch ; while Nabonidas is represented in the same capacity by Berosus. Sir Henry Rawlinson's reading of the Mugeier cylinders entirely reconciles these discrepancies. The records distinctly state that Belshazzar was the eldest son of Nabonidas, and that he was admitted to a share of the government.”<sup>1</sup>

#### CHEDORLAOMER.

In the fourteenth chapter of Genesis, a graphic though brief account is given of the invasion of Palestine by certain Eastern princes, during the life of Abraham ; and, independent of all views about inspiration, the narrative bears strong internal evidence of historical accuracy. Names, places, and lines of march are given with the clearness and minuteness of contemporary history. “ It came to pass in the days of Amraphel king of Shinar, Arioch king of Ellasar, Chedorlaomer king of Elam, and Tidal king of nations, that these made war with Bera king of Sodom,” etc. It is afterwards stated that Sodom and the neighboring cities had been tributary to Chedorlaomer for twelve years. Now the early Assyrian records remarkably illustrate and confirm the story. Shinar, Ellasar, and Elam are repeatedly mentioned in the inscriptions, and Elam is represented as the most powerful of those early kingdoms. It is known also that some of the Chaldeans were nomads, roaming from place to place like Arab tribes ; and “ Tidal *king of nations*” was probably a chief of several tribes who joined the other monarchs in their invasion. But the most striking point is that the name of Chedorlaomer has been actually found on Elamitic inscriptions, under the form *Kudur-Lagamer*. He seems to have been ruler of Ur, and to have rebuilt that old city ; for his descendant, Kudur-Mabug, says, in a short inscription which has been translated by Lenormant, “ I am the conqueror of the West, my father enlarged the city of Ur.”<sup>2</sup> There is another important inscription found at Ur, which shows that the Elamitic monarchs ruled over the whole country

<sup>1</sup> “ Chaldea and Susiana,” 132.

<sup>2</sup> “ Manual of Ancient History,” i., 355.

from Persia to the Mediterranean. It is as follows: "To Ur his king : Kudur-Mabug lord of Syria, son of Simti-silhak, worshipper of Ur, his protector marching before him, Bit-rubruah, for his preservation and the preservation of Ardu-sin his son, king of Larsa, they built."

It will be observed that the first part of this king's name is the same as that of Kudur-Lagamer. *Ur* is here a god, probably the god of light, which the name signifies. This "Kudur-Mabug, from the number of his inscriptions and the extent of his dominions, appears to have been an important monarch, but although the monuments of this period are inscribed with his name as lord paramount, he did not reign personally in Babylonia. The crown of that country he bestowed on his son Ardu-sin, whom he names in his inscriptions."<sup>1</sup> We thus see that those early biblical narratives, which some recent critics have pronounced mythical, are proved by contemporary inscriptions and monuments to be strictly historical. And the illustrations of the Bible from early records are only just beginning to be deciphered. Fuller explorations, and a more thorough acquaintance with the cuneiform writing, will add immensely to our stores of knowledge.

#### ASSYRIAN CONQUEST OF PALESTINE.

Coming down from the primeval narratives in Genesis to that period when the Jewish power began to decline, we find that the details of Bible history are confirmed by the Assyrian texts. The conquests of Shalmaneser I., King of Assyria, are not mentioned in the Bible; but from the inscription on the Nimrud obelisk in the British Museum, it appears that when Benhadad and Hazael were warring against Israel, they were attacked by the Assyrians and made tributary. Shalmaneser also says, "I received tribute from *Jehu*, son of *Omri*."<sup>2</sup> The reason why he is called son of *Omri* doubtless is that *Omri* was the founder of Samaria, in which *Jehu* reigned. One of the bass-reliefs on the obelisk represents *Jehu* prostrating himself before the Assyrian king.<sup>2</sup> Nearly a century and a half later, Tiglath-Pileser invaded Syria and Palestine, and one or two mutilated inscriptions attest

<sup>1</sup> "Records of the Past," iii., 19.

<sup>2</sup> Lenormant, i., 381.

the minute accuracy of the narrative in Scripture. Thus the conqueror writes : "The land of Beth-omri (Samaria), the goods of its people, and their furniture to Assyria I sent. Pekah their king . . . and Hoshea to the kingdom over them I appointed . . . then tribute of them I received, and to Assyria I sent."<sup>1</sup> The agreement between this and the passage in Kings is evident : "In the days of Pekah came Tiglath-pileser, and took Ijon and Abel-beth-maachah," etc., "and carried them captive to Assyria. And Hoshea made a conspiracy against Pekah, and slew him, and reigned in his stead."<sup>2</sup>

The fall of Samaria and the northern kingdom of Israel, together with the captivity of the people, is recorded in 2 Kings 17 ; and turning to the narrative of the same event in "The Annals of Sargon," inscribed upon the walls of his palace at Khorsabad, we find the following words of the conqueror : "I besieged, took, and occupied the city of Samaria, and I brought into captivity 27,280 persons. I took them to Assyria, and instead of them I placed men to live there whom my hand had conquered. I changed the government of the country, and placed over it lieutenants of my own."<sup>3</sup>

Still more remarkable is the inscription on a clay prism found at Nineveh, containing the annals of the first eight years of the reign of Sennacherib. It records, among many other conquests, the invasion of Palestine, and the enormous ransom paid by Hezekiah king of Judah to save Jerusalem : "Beyond the former scale of their yearly gifts, their tribute and gifts to my majesty I augmented and imposed them upon them. He himself, Hezekiah, the fearful splendor of my majesty had overwhelmed him. The workmen, soldiers, and builders whom for the fortification of Jerusalem his royal city he had collected within it, now carried tribute, and with thirty talents of gold, eight hundred talents of silver ; woven cloth, scarlet, embroidered ; precious stones of large size," etc., etc. ; "and to pay tribute and do homage he sent his envoy." Let this be compared with the biblical narrative, and the correspondence in almost every particular must strike the reader.<sup>4</sup>

<sup>1</sup> Smith, "Assyrian Discoveries," p. 285.

<sup>2</sup> 2 Kings 15 : 29, 30.

<sup>3</sup> "Records of the Past," vii., 28. Compare with this 2 Kings 17 : 5 *et seq.*

<sup>4</sup> 2 Kings 18 : 13 *et seq.* "Records of the Past," i., 39.

The destruction of Sennacherib's great army on the plain of Philistia is passed over in silence. This is in entire accordance with the custom of the Assyrian annalists. They described conquests, but entirely ignored defeats and reverses. We read in the Bible that "Sennacherib king of Assyria departed, and went and returned, and dwelt at Nineveh. And it came to pass, as he was worshipping in the house of Nisroch his god, that Adrammelech and Sharezer his sons smote him with the sword ; and they escaped into the land of Armenia. And Esarhaddon his son reigned in his stead."<sup>1</sup> A clay tablet found at Nineveh is now in the British Museum, containing an account of Esarhaddon's accession to the throne of his father, and a manifest reference to the tragedy that led to it. The inscription is only a fragment, but the first line preserved shows that the part lost must have described the murder of Sennacherib, and the receipt of the intelligence by Esarhaddon, who was then commanding an army on the northern border of the empire. We quote a few sentences : "From my heart I made a vow. My liver was inflamed with rage. Immediately I wrote letters, and I assumed the sovereignty of my father's house." Then after narrating his long and adventurous march and victory over rebel subjects, he continues, giving to his gods the praise for his success : "Ashur, the Sun, Bel, Nebo, Ishtar of Nineveh, and Ishtar of Arbela had me, *Esarhaddon*, on the throne of my father happily seated, and the sovereignty of the land had given to me," etc.<sup>2</sup>

Soon afterwards, having put down the revolt of Evilmerodach, and abolished the viceroyalty of Babylon, Esarhaddon established his own residence in that city, and this accounts for Manasseh king of Judah being taken captive to Babylon and not to Nineveh. We read in 2 Chron. 33:11 : "The Lord brought upon them" (Manasseh and his people) "the captains of the host of the king of Assyria, which took Manasseh with rings, and bound him with fetters, and carried him to Babylon." This fact also is recorded on the Assyrian tablet, where a list is given of the conquered monarchs who were

<sup>1</sup> Isaiah 37:37, 38 ; 2 Kings 19:37.

<sup>2</sup> "Records of the Past," iii., 103, 105.

led captives to Babylon : " I assembled twenty-two kings of the land of Syria, and of the sea-coast and the islands, all of them, and I passed them in review—Baal king of Tyre ; *Manasseh king of Judah* ; Kadumukh king of Edom ; Mitzuri king of Moab," etc.<sup>1</sup>

We have only just touched, in this review, on some of the leading points in which recent exploration has illustrated and confirmed Bible history. The field is a very wide one, and, in the present state of theological and scientific thought, a most important one. The long-lost records of Babylonia and Assyria promise, when fully examined, to throw a flood of light not only upon divine revelation, but upon the history, the religion, and the social state of great primeval nations whose names and some of whose acts are mentioned in Scripture. Very much has yet to be done by the traveller and the excavator before the sources of information contained on sculptured slabs and inscribed tablets have been reached ; and when that is done, a still more difficult task will remain in the classification of the materials and the deciphering of the records. But we look forward hopefully ; men of ability and enthusiasm are engaged in the work, and a society has been instituted in London, one of whose main objects is to promote the study of biblical archæology. So long as we have such veteran orientalists as Rawlinson, Layard, and Birch, and so long as the subject enlists the scholarship of Oppert and Menant in France, of Delitzsch in Germany, of Talbot, Sayce, Rodwell, and Boscawen in England, we may confidently anticipate the most complete success.

Recent explorations in Egypt, conducted mainly by Brugsch, Mariette, and Chabas, and those in Palestine, undertaken by English and American scholars, are no less interesting and important than the Assyrian researches. They illustrate every book in the Bible. But upon this inviting field we cannot for the present enter. We have said enough, however, to show that the Bible has nothing to fear from the most exhaustive research. Evidences of its historic accuracy are impressed on the ruins of Palestine, they are written on the tombs and temples of Egypt, and they are buried deep on sculptured stones and clay tablets,

<sup>1</sup> " Records of the Past," iii., 120, 107.

beneath the scathed mounds of Babylonia and Assyria. The touch of infidelity cannot obliterate them. Smitten to the dust by the judgment of heaven—dreary, desolate, forsaken, those primeval monuments will remain for ages to come irresistible proofs of the truth of the Bible.

J. L. PORTER.

## GOD'S INDISCRIMINATE PROPOSALS OF MERCY AS RELATED TO HIS POWER, WISDOM, AND SINCERITY.

**I**F God makes proposals of mercy to men, who, he foresees, will certainly reject them and perish, and whom he immutably purposes to leave without effectual calling, how can his power and wisdom be cleared, save at the expense of his sincerity? or his sincerity at the expense of his wisdom or power? This is obviously the point in the Reformed or Augustinian theology most difficult of adjustment. The excogitation of the scheme of the "Hypothetic Universalists" among a part of the French Reformed, and the intricate discussions between them and the Genevans, evince the fact. It is also disclosed in the proposal of this problem by Sir Robert Boyle, to John Howe, as a proper subject for the exercise of his sanctified acumen. The result was his famous treatise, "The Reconcileableness of God's Prescience of the Sins of Men with the Wisdom and Sincerity of his Counsels," etc. It is against this point that the most persistent attacks of Arminians are still made. "It is at this point," says Dr. A. A. Hodge's "Atonement," "very wisely, as we think, the Arminian erects his main citadel. We freely admit that just here the advocates of that system are able to present a greater number and variety of texts which *appear* to favor the distinguishing principles of their system than they are able to gather in vindication of any other of their main positions." . . . . "Then gathering together their scriptural evidence for the general and indefinite design of the Atonement, they proceed with great appearance of force to argue inferentially against the outflanked Calvinistic positions of unconditional

election and efficacious grace. In this manner Richard Watson, in effect, puts the strain of his entire argument upon this one position."

The occasion for calling in question either God's sincerity, or his wisdom, or power, upon the supposition of an unconditioned decree, arises from three classes of Scriptures. One is the indiscriminate offer of salvation. Another is the ascription of Christ's sacrifice to love for "the world" as its motive, and the calling of him the "Lamb of God who taketh away the sins of the world," "giveth himself for the world" etc. The third is composed of those which present God as pitying all sinners, and even those who are never saved. Every reader's mind will suggest texts of each class. Now, it is notorious that these furnish the armory from which the Arminians equip their most pertinacious attacks on Calvinism; that it is on these texts the Calvinistic exegesis labors most and displays the most uncertainty; and that the usual Calvinistic solutions of them are scornfully denounced as inadequate by their opponents. These facts, of course, do not prove that the Arminians are right; but they evince the occasion for, and utility of, more satisfactory discussion.

The attempt of the "Hypothetic Universalists" was to reconcile all the Scriptures by ascribing to God two acts of will concerning human salvation: one general and conditional volition to send Christ to provide expiation for all men, and to receive them all to heaven, provided they would believe on him; the other, a special and unconditioned volition to call the elect effectually, and thus insure that they should believe and be saved. Then they supposed that all the texts in question could be explained as expressions of the general and conditioned volition. But Turretin's refutation (for instance, Loc. iv., Qu. 17th) is fatal. He urges that the only merciful volition of God in Scripture is that towards the elect; and "the rest he hardeneth;" that it is inevitably delusive to represent an omniscient and omnipotent Agent as having any kind of volition towards a result, when, foreseeing that the sinner will certainly not present the essential condition thereof—faith—he himself distinctly purposed not to bestow it; that the hearing of the Gospel (Rom. 10:14) is as means equally essential, and God pro-

videntially leaves all the heathen without this; and that it is derogatory to God's power and sovereignty to represent any volition of his, that is a volition, as failing in a multitude of cases. It is significant that the Reformed divines of Turrettin's school seem usually to conduct this debate on the assumption (sometimes tacit, sometimes expressed) that as God had no *volition* towards the salvation of the non-elect, so he could not have any propension or affection at all towards it.

The perspicacious eye of Howe saw this assumption, and he made a tentative effort to expose it. To him also belongs the honor of rejecting and exploding that dogma of God's prevenient, efficient *concurrus* in sinful actions, which the great Protestant scholastics had borrowed from the Dominican school, and defended with a zeal so perverse. And now we find a Thornwell and a Hodge discarding this *dogma* as an unhappy excrescence on the Bible doctrines of the decree and Providence. Howe (§ xxii.) is answering a supposed objector, who, like Turrettin, urges the inconsistency of "an ineffectual and imperfect will" (in the Almighty) "which doth not bring to pass the thing willed." His answer is: "That imperfection were with no pretence imputable to the divine will, merely for its not effecting every thing whereto it *may have a real propension.*" He then proceeds to describe this propension towards an end which is short of an effective volition as a "mere velleity," and declares that he is more ready to assert of God "a will not effective of the thing willed," than fly in the face of the many Scriptures which ascribe to God a pitifulness towards the lost. He then endeavors to vindicate God from this seeming paradox by saying that, while the salvation of all men is, *per se*, an object proportionable to a proper propension of God's will "by only simple complacency," other "more valuable reasons" may weigh with God not to purpose the salvation of all, "with the higher complacency of a determinative will." "Since the public declarations of his good-will towards all men import no more than the former," his sincerity is thus reconciled with his immutable prescience.

The candid mind feels that there should be a truth somewhere in that direction in which the "Hypothetic Universalist" was vainly groping. Has not Howe here caught a glimpse of

that truth? And why have the eyes of Reformed theologians been so often "holden" from seeing it distinctly? These questions deserve inquiry.

The direction in which the answers are conceived to lie may be best indicated by an analogical instance. A human ruler may have full power and authority over the punishment of a culprit, may declare consistently his sincere compassion for him, and may yet freely elect to destroy him. A concrete case will make the point more distinct. Chief-Justice Marshall, in his "*Life of Washington*" (vol. iv., ch. vi.), says with reference to the death-warrant of the rash and unfortunate Major André: "Perhaps on no occasion of his life did the commander-in-chief obey with more reluctance the stern mandates of duty and of policy." In this historical instance we have these facts: Washington had plenary power to kill or to save alive. His compassion for the criminal was real and profound. Yet he signed his death-warrant with spontaneous decision. The solution is not the least difficult either for philosophy or common-sense. Every deliberate rational volition is regulated by the agent's dominant subjective disposition, and prompted by his own subjective motive. But that motive is a complex, not a simple modification of spirit. The simplest motive of man's rational volition is a complex of two elements: a desire or propension of some subjective optative power, and a judgment of the intelligence as to the true and preferable. The motive of a single decision may be far more complex than this, involving many intellectual considerations of prudence, or righteous policy, and several distinct and even competing propensions of the optative powers. The resultant volition arises out of a deliberation, in which the prevalent judgment and appetency counterpoise the inferior ones. To return to our instance: Washington's volition to sign the death-warrant of André did not arise from the fact that his compassion was slight or feigned; but from the fact that it was rationally counterpoised by a complex of superior judgments and propensions of wisdom, duty, patriotism, and moral indignation. Let us suppose that one of André's intercessors (and he had them, even among the Americans) standing by, and hearing the commanding general say, as he took up the pen to sign the fatal paper, "I do this

with the deepest reluctance and pity ;" should have retorted : " Since you are supreme in this matter, and have full bodily ability to throw down that pen, we shall know by your signing this warrant that your pity is hypocritical." The petulance of this charge would have been equal to its folly. The pity was real ; but was restrained by superior elements of motive : Washington had official and bodily power to discharge the criminal ; but he had not the sanction of his own wisdom and justice. Thus his pity was genuine, and yet his volition not to indulge it free and sovereign.

The attempt to illustrate the ways of God by such analogies is too obvious to be novel. What, then, are the objections on which Calvinists have usually set them aside as unsatisfactory ? In approaching this question it is instructive to notice the manner in which the extreme parties deal with the parallel case in God's government. Says the strong Arminian : " Since God is sovereign, and also true and sincere, therefore I know that, when he declares his compassion for ' him that dieth,' he has exerted all the power that even omnipotence can properly exert on ' free-will,' to turn that sinner to life." Thus this party sustain God's sincerity at the expense of his omnipotence. The party of the other extreme says : " Because God is sovereign and omnipotent, therefore we know that, were there any pity in him for ' the sinner that dieth,' that affection would inevitably have applied almighty grace, which would have turned him without fail to life ; so that we must explain the merciful declaration as meaning something else than it seems." They thus save God's omnipotence and sovereignty at the expense of his sincerity. The two parties, while in extreme opposition, fall into the same error—the sophism of the imagined accuser of Washington. Their common mistake would, in the case of a wise and good man, be exploded by explaining the nature of motive and free rational volition. The correct answer to the Arminian is to show him that the existence of a real and unfeigned pity in God for " him that dieth" does not imply that God has exhausted his divine power in vain to renew the creature's " free-will " in a way consistent with its nature, because the pity may have been truly in God, and yet countervailed by superior motives, so that he did not will to exert his omnipotence for that sinner's re-

newal. The other extreme receives the same reply ; the absence of an omnipotent (and inevitably efficient) volition to renew that soul does not prove the absence of a true compassion in God for him ; and for the same reason the propensity may have been in God, but restrained from rising into a volition by superior rational motives.

Evidently, then, if this parallel could be used safely, it would relieve the difficulty of the problem, and conciliate extremes to the scriptural truths involved. The supposed obstacles seem to class themselves under three heads. 1. The difference between a finite and an infinite almighty governor makes the parallel worthless. 2. Such a theory of motive and free agency may not be applied to the divine will, because of God's absolute simplicity of being, and the unity of his attributes with his essence, the total lack of "passive powers" in his glorious nature, and the unity and eternity of his whole will as to all events. It is feared that the parallel would misrepresent God's activities of will by a vicious anthropomorphism. 3. No such balancing of subjective motives takes place without inward strivings, which would be inconsistent with God's immutability and blessedness.

None will deny that the discussion of God's nature and activities should be approached with profound reverence and diffidence. One of the clearest declarations concerning him in the Scriptures is, that we may not expect to "find out the Almighty unto perfection." Should a theologian assume, then, that his *rationale* of God's actings furnished an exhaustive or complete explanation of them all, this alone would convict him of error. It must be admitted, also, that no analogy can be perfect between the actions of a finite and the infinite intelligence and will. But analogies may be instructive and valuable which are not perfect : if they are just in part, they may guide us in the particulars wherein there is a true correspondence. And the Scriptures, which do undertake to unfold "parts of his ways," will be safe guides to those who study them with humility.

Turretin, entering into discussion with the "Hypothetic Universalists," remarks that the foundations of the faith remain safe, so long as it is firmly held on all hands : 1. That the corruption of men's souls is universal, and every man's inability for delivering himself from it universal and invincible without

the efficacious grace of God. 2. That there is a sovereign and particular election of the saved, unconditioned on their foreseen graces, and a preterition of the rest of mankind. 3. That there is an efficacious grace, the gift of this election, working saving faith, without which in action no one truly chooses godliness. 4. That gospel revelation is the necessary and only sufficient means of working saving graces. These, saith he, are the capital dogmas of the faith (on this subject) which all the Reformed defend amidst their minor diversities against all forms of Pelagianism and semi-Pelagianism.

1. It is objected against all use of the explanation suggested, that, while it applies to a human ruler, who is not omnipotent, it does not apply to God, who is almighty. Washington was restrained from indulging his compassion towards André, by remembering the dangers and mischiefs which would result from the impunity of a spy. But if he had possessed an omnipotent control over all hearts and all events, by which he could with perfect facility obviate all those mischiefs, then his compassion must have gratified itself, if truly felt, in André's release. God, it is urged, has that omnipotence. If he feels any propension of mercy towards the sinner "that dieth," and bethinks himself of the dangers to his moral government which would arise from a sinner's impunity in guilt, he also knows that it is infinitely easy for him to obviate all such possible dangers by sanctifying the sinner himself, and also all others who might be tempted to sin by the example of his impunity, just as he actually does sanctify his justified elect.

Now it is obvious that this reply proceeds on the following assumption: That if the obstacle of physical inability be removed in God, by his consciousness of omnipotence, there cannot be any other rational ground, in the view of God's omniscience, that may properly counterpoise or hold back the propension of mercy. But the statement of this is its sufficient exposure. It must always be exceedingly probable that an all-wise mind may see, among the multifarious concerns of his vast kingdom, good reasons for his action, of which we cannot have the least conception. Let us select a specific case, that, for instance, of Judas Iscariot. Would not he be a rash man who should assert that the infinite God could not see, in his own

omniscience, any other ground for his volition not to attempt his effectual calling than one of these two, either an entire indifference to his misery, or a conscious inability to renovate his soul? The logic of the objector is, moreover, optimistic. It proceeds on the assumption that we are entitled to hold that God's ultimate end in the government of the universe is the greatest aggregate well-being of creatures. But we are not entitled to hold thus. We know that his ultimate end is his own glory. But we do not know all the ways in which God may deem his glory is promoted. All that we can say is, not that God must procure that state of the universe which is on the whole the *best*, *i.e.*, the most benevolent; but that he will of course have that universe which most completely satisfies the set of ends which have commended themselves to his perfections as most proper for him to pursue. But we are not qualified to say what all of those ends are. It may be that it is proper they should not include the happiness of the largest possible number of sinners, but something else still more worthy of God. When we have admitted this, we have virtually admitted that God may see, in his own omniscience, a rational ground other than inability for restraining his actual propensity of pity towards a given sinner. The first objection, then, however plausible in appearance, is found to be empty. And it is especially to be noted, that while it professes a zeal for God's infinitude, it really disparages it. Our position is, after all, the modest and reverential one.

Let us interpose here this definition, to preclude misunderstanding: That the phrase "divine will," which we are about to use, is meant not in its narrow sense of the faculty of choice; but in the wider sense of the active powers, or "conative" powers, so well established among Calvinists.

2. The attempt to illustrate the action of the divine will from the rise of rational volition in man, has doubtless been prejudiced by the scholastic explanations of God's absolute simplicity. They would have us believe, not only that this excludes all composition and aggregation of quantitative parts, but all true distinction of essence and attributes. They would have the idea of God as absolutely devoid of construction in thought as his substance is of construction in reality. We

must, in his case, identify essence and attributes. God is *actus purus*. Any attribute is God ; and hence one attribute is differentiated from another only by our apprehension of it. With him cognition and effectuation are identical. It does not satisfy them to say that God is an infinite monad, as the rational human soul is a finite monad ; and that his attributes, like man's essential powers of intelligence, sensibility, and will, are not limbs or parts attached to the spirit, but essential modes of functions with which it is endued. They require us to identify God's attributes with his essence in a way inconceivably closer than we do man's essential powers with his essence. Now, if this speculation be correct, the attempt to apprehend the action of the divine will by the human must be wholly erroneous. There could be no such distinction, as is true of man, between motive and volition, or between the optative powers and the power of choice. Nor could there be any sense whatsoever in which God's subjective motive could be complex.

But we deny that the speculation is correct, susceptible of proof, or possible to be valid to the human mind. Evidently the cognition of such a being is inaccessible to man's intelligence. The only way he has of knowing substance is through its attributes ; and the only cognition we have of it is as the intuitive notion, which the reason necessarily supplies, of the *subjectum* to which the attributes perceived must be referred: Hence, to require us to think substance as literally identical with each attribute rationally referred to it, is to forbid us to think it at all. Again, reason forbids us to think different attributes as identical. We intuitively know that thought is not conation, and conation is not sensibility ; it is as impossible to think these actually identical in God as in ourselves. Last, this speculation brings us too near the awful verge of pantheism. Were it true, then, it would be the shortest and most natural of steps to conclude that God has no other being than the series of activities of the several attributes with which they seek to identify the being. Thus we have the form of pantheism next to the gulf of nihilism. If the attributes are identical with the being of God and with each other, and if it be thus shown that God's thought makes the object thereof, then, since God is eternally, necessarily, and infinitely intelligent, these results must rigidly

follow : That all objective being known to God must be also as eternal and necessary as God ; and that it must be as infinite as he is. What more would Spinoza have desired to found his mathematical proof of pantheism ? The speculation is not true any more than it is scriptural. The Bible always speaks of God's attributes as distinct, and yet not dividing his unity ; of his intelligence and will as different ; of his wrath, love, pity, wisdom, as not the same activities of the Infinite Spirit. We are taught that each of these is inconceivably higher than the principle in man which bears the corresponding name ; but if the Scriptures do not mean to teach us that they are distinguishable in God, as truly as in man, and that this is as consistent with his being an infinite monad as with our souls' being finite monads, then they are unmeaning.

In the rational creature, notwithstanding the simplicity of the spirit, judgments of the preferable and conative propensions are not identical with the volition in which they result. In him subjective motive is complex, and a given element of motive may be truly present, and yet not separately expressed in the volition, because over-preponderating motives prompt the agent freely to restrain that element. Then, the absolute simplicity of God does not forbid our ascribing to him an inconceivably higher mode of action of will, which is yet truly analogous.

We may be reminded that the "Confession" declares God to be "without passions." So the theologians tell us that we must ascribe to him no "passive powers ;" for then he would not be immutable. He acts on every thing ; but is acted on by none. He is the source, but not the recipient of effects. This is indisputable. But we should not so overstrain the truth as to reject two other truths. One is, that while God has no passions, while he has no mere susceptibilities such that his creature can cause an effect upon it irrespective to God's own will and freedom, yet he has active principles. These are not passions, in the sense of fluctuations or agitations, but none the less are they affections of his will, actively distinguished from the cognitions in his intelligence. They are true optative functions of the divine Spirit. However anthropopathic may be the statements made concerning God's repentings, wrath, pity, pleasure, love, jealousy, hatred, in the Scriptures, we should do

violence to them if we denied that he here meant to ascribe to himself active affections in some mode suitable to his nature. And it is impossible for us to suppose an agent without active principles, as well as cognitive, as we could not believe that the compass could move the ship without any motive power. The other truth is, that objective beings and events are the real occasions, though not efficient causes, of the action both of the divine affections and will. Are not many divines so much afraid of ascribing to God any "passive powers," or any phase of dependence on the creature, that they hesitate even to admit that scriptural fact? But why should they recoil from the simple statements of his Word on this point, unless they were confused or misled by the old sensualistic view, which regarded the objective impression as somehow the efficient, instead of the mere occasion, of the following activities of the percipient soul: "God is angry *with the wicked* every day" (Ps. 7:11); "But the *thing* that David had done displeased the Lord;" "My delight is *in her*" (Is. 62:4); "*In these things* I delight, saith the Lord" (Jer. 9:24). Is all this so anthropopathic as not even to mean that God's active principles here have an objective? Why not let the Scriptures mean what they so plainly strive to declare? But some seem so afraid of recognizing in God any susceptibility of a passive nature, that they virtually set Scripture aside, and paint a God whose whole activities of intelligence and will are so exclusively from himself that even the relation of objective occasion to him is made unreal, and no other is allowed than a species of coincidence or pre-established harmony. They are chary of conceding (what the Bible seems so plainly to say) that God is *angry because* men sin; and would go no farther than to admit that somehow he is angry *when* men sin, yet, because absolutely independent, angry only of himself.

Now, our rational nature compels us to think these active principles relevant only when they act towards their proper objectives. If the wise and righteous reason does not perceive something that has (or is to have) actuality that is wicked, it does not have indignation; the legitimate condition for the action of this affection is wholly absent. If it does not see some being approvable, it does not feel the love of moral complacency. Why should not this be most true of the perfect reason, all of

whose activities are most absolutely true to the actual? Nor is there any danger of sacrificing God's independence or immutability, or of imputing to him "passive power," or of tarnishing his nature with the fluctuations and agitations of passion. For, first, since his will was eternally sovereign, there can be nothing holy or unholy, in all time, in the actual objective universe, which was not decreed freely by his effective or permissive will. Thus, while it is true that what God looks at objectively is the unfailing occasion in him of the appropriate subjective affection; it is also true that there cannot be any thing actual for him to look at save such things as he freely chooses to permit to occur or exist. Second, there is no truth in this point of the sensualistic creed, either for God or man; the object is not efficient of the affection directed upon it, but the mere occasion. The affection is from the inward spontaneity. And, third, God's omniscience is declared in the Scriptures to be infinite and eternal; so that no amiable or repulsive object can be a novelty to his mind. The treason of Judas was as clearly seen and comprehended, in all its hateful features, in God's infinite intelligence, before the foundation of the world as the moment it was perpetrated; nor has there been one instant since in the divine consciousness when the mental comprehension of that crime has wavered or been forgotten or displaced, or even obscured by other objects of thought. Thus, the object being stable in the divine intelligence, the appropriate affection has been equally changeless in the divine will. The truth we must apprehend, then, is this—we cannot comprehend it—that God eternally has active principles directed towards some objective, which combine all the activity of rational affections with the passionless stability of his rational judgments, and which, while not *emotions*, in the sense of change, or ebb or flow, are yet related to his volitions in a way analogous to that which obtains between the holy creature's optative powers and his volitions. Can we picture an adequate conception of them? No; "it is high: we cannot attain unto it." But this is the consistent understanding of revelation; and the only apprehension of God which does not both transcend and violate man's reason.

God's absolute unity and simplicity may be supposed by some to furnish another objection to the hypothesis that his

propensions and his volition are distinguishable in his consciousness as truly as in a holy creature's. It may be urged that this would imply an actual sequence in the parts of the divine will, and the acquisition by him of additional acts of will. Let this be considered. In a finite rational spirit there is unquestionably a partial parallel between volition and deduction ; in this, that as this finite mind, in its logical process, advances from premises to conclusion, making a literal (though possibly rapid) *sequence* of mental acts ; so, in its acts of choice when rationally conscious, it proceeds from motive to volition, making a *sequence* of voluntary activities equally literal. Now, all are agreed that the infinite intelligence cannot have logical processes of the deductive order. Its whole cognition must be intuition. For else it would follow that omniscience was not complete at first, and receives subsequent accessions of deductive knowledge. (This is one fatal objection to the Molinist scheme of *scientia media*.) So, it may be urged, the activity of the divine will must be absolute unity ; if we represent volition as arising out of motive, and the divine consciousness as discriminating the one from the other, we shall have the eternal will acting in succession, which is untenable.

This comparison of the intellectual and active powers will lead us to a solution. It must undoubtedly be admitted that all of God's cognition is immediate intuition, and that he can neither have nor need any deductive process by which to reach truth. But does it follow therefrom that he has no intuitions of relations ? Let the reader reflect that many of our surest intuitions are of truths of relation, as of the equality of two magnitudes of which each is equal to a third and the same ; that a multitude of things which exist do exist in relation ; and that it is the very glory and perfection of God's intelligence that it thinks every thing with an absolute faithfulness to the reality known by him. He will not be rash enough to question the fact that among God's infinite cognitions are a multitude of intuitions of truths in relation. Again, since all God's knowledge is absolutely true to the actual realities known, wherever he knows one thing as destined to depend on another thing, there must be a case in which God *thinks a sequence*. Let the distinction be clearly grasped. The things are known to God as in

sequence ; but his own subjective act of thought concerning them is not a sequence. How can this be ? Our limited intelligence cannot realize it in thought : God can, because he is infinite. We *must*, then, to avoid wronging God on the one hand or the other, in our apprehension of his omniscience, acquiesce in this statement : That while the infinite capacity of the divine mind enables it to see coetaneously by one all-including intuition every particular truth of his omniscience, his absolute infallibility also insures the mental arrangement of them all in their logical and causal relations, as they are destined to be actualized in successive time. *Ὦ βάσις πλόντον καὶ σοφίας καὶ γνώσεως θεόν !* Thus all must admit, for instance, that in the rational order of thinking, we think cause as *in order to* effect. It is an intuition. Now, is this an infirmity or a correct trait in the finite mind ? Surely it is a correct trait. Will God's infinite mental superiority, then, prevent his doing this correct thinking, conceiving cause as *in order to* effect ? Surely not. Yet he sees both cause and effect by one coetaneous intuition, and does not need, like us, to learn the cause by inference from the effect, or the effect by inference from the cause. So the rational order of thought is, that the object is in order to the volition. The hunter must see the animal in order to aim his weapon. Does not the infallible mind of God see object and act in the same rational order ? Doubtless ; but he has no need, like us, of a chronological succession. God's cognitions, then, while devoid of sequence in time, doubtless preserve the appropriate logical order.

Now the same considerations will lead us to the proper conclusion touching the order of motive and volition in God's infinite will. This is not irrational, because infinite. From our point of view, subjective motive is in order to volition : they are related as cause and effect. We cannot think them otherwise. However rapidly we may conceive a spirit's spontaneity to act, we cannot help thinking that when it formed a rational volition it did so because a rational motive went before. There is no ascertainable sequence of time ; but none the less does our reason insist on putting the motive and volition in a causative sequence. Again, I ask, Is this an infirmity or a correct action of our reason ? If our reason acts correctly in

insisting on this causative order, does God's infallible reason signalize its infinite superiority by refusing to think the order aright? Surely not. Here, then, we are shut up to the same apprehension; that while the action of the divine mind in rational volition is not successive, yet its infinite capacity preserves the proper causal subordination and distinction of rational motive and resultant volition. It thus appears that the unity and eternity of all the acts of the divine will do not preclude the proper discrimination and relation in the divine consciousness of motive and volition, affection and action. We see that if we insisted on that dogma, we should sacrifice the rationality of the divine will in the needless attempt to preserve its unity.

The justice and value of this conclusion may be illustrated by the light which it throws on the supralapsarian scheme of predestination. Because a rational mind determines first the ultimate end, and then the intermediate means, and because that which is last in effectuation is first in thought, therefore these divines insist on this sequence in the parts of the decree: 1st. God selects, out of men *in posse*, a certain number in whose redemption he will glorify himself. 2d. As a means to this ultimate end he determines to create mankind. 3d. He determines to permit their fall. 4th. He decrees to send his Son in human nature for the redemption of his elect. Sublapsarians, perceiving the harshness and unreasonableness of this, propose the opposite order of sequence (but still a sequence). God decreed, 1st, to create man holy; 2d, to permit his fall; 3d, to elect out of fallen mankind his chosen people; 4th, to send his Son for their redemption. Supralapsarians retort that this scheme makes God's decree as truly conditioned on the creature's action as the Arminian, though on a different condition. So the debate proceeds.

But he who apprehends the action of the infinite mind reasonably and scripturally at once, sees that, while the sublapsarian is right in his spirit and aim, both parties are wrong in their method, and the issue is one which should never have been raised. As God's thought and will do not exist in his consciousness in parts, so they involve no sequence, neither the one nor the other. The decree which determines so vast a multitude of parts is itself a unit. The whole all-comprehend-

ing thought is one, coetaneous intuition ; the whole decree one act of will. But in virtue of the very consistency and accuracy of the divine plan, and infinity of the divine knowledge, facts destined to emerge out of one part of the plan, being present in thought to God, enter into logical relation to other parts of the same plan. As the plan is God's thought, no part precedes any other. But none the less those parts which are destined to be, in execution, prior and posterior, stand in their just causal relations in his thinking. One *result decreed* is to depend on another result decreed. But as the decree is God's consciousness, all is equally primary. Thus there will be neither supra- nor infra-lapsarian, and no room for their debate.

To this whole view of God's active principles, it may be replied by some that it is too anthropomorphic. We may be reminded of the rebuke of the 50th Psalm : "Thou thoughtest that I was altogether such an one as thyself ; but I will reprove thee." It has been pungently said, that "whereas the Scriptures say man was made in the image of God, some would have a God made in the image of man." This should justly remind us of the need of much humility and care, lest we should ascribe to him any vicious anthropomorphism. Is there no safe guide ? May it not be found in these rules : That we shall on no pretext ascribe to God any defect of the creature, or any self-contradiction ; and that we bow implicitly to the declaration he makes of himself in the word, as honestly interpreted by the "analogies of the faith"? And so much may be justly claimed for the views above defended, that whether speculative, or abstruse, or not, their whole application is, not to wrest God's declarations of himself, but to restore them to a more natural and unforced exposition ; to make them mean more simply what they seem to mean to the plain reader.

Now, there is a sense in which all our apprehensions of God must be anthropomorphic (as well as of every thing else). It must be cognitions according to the forms of man's reason. If we are forbidden to think after human norms, we cannot think at all. Again, the Scriptures assure us that our spirits were created after the rational (and moral) image of God. Man unfallen was a correct miniature of the infinite Father. And so far as we can be certain that a specific law of thought or action

is unperverted by the ruins of our fall, we have in that law a finite pattern of God's infinite law of thought or action. If we would not fall into the bottomless gulf of universal scepticism, we must hold that truth is eternal and uniform in heaven and earth. So far, then, as we are sure of a process of mind as leading to pure truth, we are sure that, in that process, we are akin to all other minds, created and uncreated. It thus appears manifest that a certain degree of anthropomorphism, so far from being suspicious, is the necessary signature of true conceptions concerning all other rational beings. The mind must *be conscious* in order to have cognitions about any thing. So it *must construe its own* consciousness, in order to formulate its objective knowledge. Psychology must underlie logic. Sir William Hamilton has shown that it must at least implicitly underlie our natural theology.

Especially may it be urged that every intelligent Calvinist, when stating and establishing the nature of the human will and free agency, has appealed to God's freedom for illustration. Is not this one of the main arguments we use against the Arminian dogma, "contingency of will essential to freedom;" that God's will never was contingent, but eternally determined to holiness, and yet is he the truest and noblest of all Free Agents? And what is effectual calling, which restores the lost image, in its central work, save a rectification of man's free agency after the pattern of God's? And does not every sound divine teach that just in degree as the activities of the human will are rational, in that degree they approach the pattern of the divine? Let it be noticed, then, that in seeking the analogy by which to illustrate God's will in its actions touching the disputed cases, we selected the most rational and righteous human will; and we found that the more completely it became such, the better it fulfilled our purpose of aiding us to apprehend God's will.

3. The remaining difficulty to be noticed is, that the conception presented of the divine affections and volitions would involve the idea of a strife in the divine bosom. Such is doubtless the result of deliberation between competing motives in the human breast. The reaching of the final choice is attended with agitation and pain. And such strife must not be ascribed to God. But let it be considered whether this inward struggle

arises from the fact that motives are complex, or from the fact that the affections which enter into our motives are passionate? The latter is evidently the true statement. We cannot picture in our minds active principles which shall have, on the one hand, all the impulsive energy of affections, and, on the other, all the immutable equanimity of deity; yet we must ascribe just these principles to God. But we can conceive that, just in degree as a man's affections approximate that steadiness and purity, the adjustment of them into the rational and righteous volition involves less inward struggle. This is sustained by observation. We have seen how wisdom, justice, and patriotism in Washington's breast strove with and mastered the pity which pleaded for the life of the spy who had nearly ruined America. But the majestic calmness of that great man did not desert him. Had a weaker nature been called to perform the painful duty of signing that death-warrant—the gallant but frivolous Gates, for instance—he would have shown far more agitation; he would perhaps have thrown down the pen and snatched it again, and trembled and wept. But this would not have proved a deeper compassion than Washington's! His shallow nature was not capable of such depth of sentiment in any virtuous direction as filled the profounder soul. The cause of the difference would have been in this: that Washington's was a grander and wiser as well as a more feeling soul. Dying saints have sometimes declared that their love for their families was never before so profound and tender; and yet they were enabled by dying grace to bid them a final farewell with joyful calmness. If, then, the ennobling of the affections enables the will to adjust the balance between them with less agitation, what will be the result when the wisdom is that of omniscience, the virtue is that of infinite holiness, and the self-command that of omnipotence?

4. Another line of argument will lead us to the same conclusion: that the absence of a volition in God to save does not necessarily imply the absence of compassion. This may be made perspicuous thus. When we teach that God's election to life is unconditioned, Arminians often leap to the conclusion that it must be therefore capricious and partial. When we point them to God (Rom. 9:11) determining that the elder,

Esau, should serve the younger, Jacob, " before the children were yet born, or had done any good or evil ; that the purpose according to election should stand, not of works, but of him that calleth ;" and when we take this as teaching that God's selection of Jacob was not conditioned on his foreseen penitence or faith, Arminians reject our construction and exclaim that this would be mere omnipotent caprice and injustice. But no intelligent Calvinist admits this. He declares that by an unconditioned act of divine will he does not mean a motiveless act. To ascribe any motiveless volition to God would contradict the Scriptures, which declare that all his actions are done in wisdom ; and the " Catechism," which teaches us that his decree is a purpose " according to the *counsel* of his will." We doubt not but that God had his most wise, holy, and sufficient ground and reason for selecting sinful Jacob, rather than sinful Esau, to receive the inworking of faith and repentance. All we know about that reason is, that God did not find it in any foreseen piety that was to exist in Jacob ; because the only piety there would ever be in Jacob to foresee was that which was to result from his election. Where God found his motive we know not ; there was room enough, unimaginable by us, in the views of his infinite mind ranging over the affairs of his vast kingdom.

This truth should be familiar to the Calvinist ; but it may not be amiss to make it clearer. A wise commander has his army in the presence of the invader. He has been regularly guarding his approaches by keeping one regiment from each five out as pickets for twenty-four hours. The duty is full of hardship and danger. The morning has come for the fifth regiment of a particular brigade to take its turn ; but there appears an unexplained order from the commander to spare this regiment, and send back another, which has already had its turn. At once all is surprise and discontent among these men. They demand to know the reason of this injustice. Is it because the commander has a pique against them, and takes this way to punish them ? The messenger assures them that this is not the commander's motive. Is it, then, because he confides in their vigilance and bravery so much more than in the fifth, so that the new order is a mark of confidence ? Again, the messenger answers, No ; it is certain that the commander's motive

is not connected in any way with the respective merits or faults of the men in the two regiments. "Then tell us," they exclaim, "his real ground." The messenger replies: "I am not able: all I know is, that I was told to deliver this positive order; it is yours to obey." The next morning the mystery is solved thus: At daybreak messengers fly from the commander to every brigade, ordering all to get under arms, and to prepare to deliver battle at sunrise. The general of this brigade is ordered to select the fifth regiment to cover the front of his other four as skirmishers, and receive the first shock of the onset, *because they alone, in that brigade, have rifles of long range suitable for the service.* Now it is seen whether the strange order of the previous morning was capricious! After a day and night of sleepless watching, these men would have been unfit for their arduous and perilous duty on the all-important day. Yet this wise ground had nothing to do with the respective merits of the men: all were good soldiers. Why, then, did not the commander publish his reason along with his order, when it would have saved so much angry surmise? It was not only his right but his sacred duty to conceal the purpose out of which that reason grew; else its premature publication would have enabled the vilest deserter to advertise the invader, who would adopt measures which would cost the blood of hundreds of brave men. Such an instance is worthless for revealing to us the specific nature of the grounds on which he acts whose "glory it is to conceal;" but it may teach us how certainly he has adequate grounds for every volition, and how it befits the honor of his vast government "to give no account of his matters to any man."

We are not to suppose, then, that because God's predestination is unconditioned, it is motiveless, unreasoning, or capricious. Returning now to the case of Rom. 9:11, and interpreting it scripturally, we learn that God's rational ground for selecting Jacob was not the foresight of his piety, but some ground unknown to us which commended itself properly to the Lord's wisdom and holiness. The question which we wish to press just here is this: Did not God feel, notwithstanding this properly overruling rational motive, the abhorrence for Jacob's foreseen original sin and actual meanness, suitable for an infinitely holy

nature to feel, and naturally tending, had it not been counterpoised, to Jacob's righteous rejection? The Scriptures answer this question for us. (See Ezek. 16:5, 6; Neh. 9:27; Jer. 32:31, 37; 1 Peter 4:17.) Indeed, neither our good sense nor the admitted principles of theology allow us to answer in the negative. For the former decides that moral principles must act impartially, raising similar sentiments when similar objects are presented; and we cannot conceive how a rational and ethical nature could be sensible to the demerit of A's act, and insensible to the very same demerit of B's act. The latter distinguishes that while God acts all things freely, some of those free things he acts "necessarily"—that is, by the moral necessity of his own perfections; while others he acts optionally. In neither class of activities can there be any "coaction," because he is always absolute sovereign and first cause. But to some activities he is determined with eternal certainty by his own perfections; while to some he determines himself "arbitrarily" (by which is meant, of course, not tyrannically, but *libertate meri arbitrii*). Thus, "God cannot lie," but God had the liberty *meri arbitrii* to make four moons to the planet Earth and one to Jupiter, or four to Jupiter and one to Earth. Now, having grasped this distinction, we must say that while God has this liberty of mere option whether or not to *execute* his affection of pity or reprobation towards any of his own creatures, he has not this liberty of option about *having* the appropriate affections of his moral nature towards any of them. Is this because an exterior superior agent compels him to feel them? By no means; but because the regulative control of his own immutable perfections absolutely insures the consistent actions of his own principles always.

God doubtless felt then a similar moral reprobation for Jacob's foreseen supplanting falsehood to that which he felt for Esau's heady self-will. Yet he elected Jacob and passed over Esau! How was that? We are now prepared to answer. Because that moral reprobation (whose natural propensity in either case was to righteous rejection) was, in Jacob's case, overruled by a good and sufficient motive; and because that motive, in Esau's case having no application, left the moral reprobation to issue naturally and righteously in his rejection. An ab-

solute but benevolent monarch has to pass on the fate of two murderers. A is a skilful physician ; B is ignorant of that art. The law-abiding people are grievously scourged by pestilence, and suffering sore dearth of medical aid. The king finds both A and B odiously and equally guilty ; yet he reprieves A, that his medical skill may be used for the suffering sick. For what is B hanged ? For murder only. But was not A, who escapes, also equally guilty of murder, and does it not follow that B was really hanged for his ignorance of medicine ? A child can see the sophism, and can give the obvious solution : That B was hung for the guilt of his murder solely, and that the medical consideration (which weighed against A's equal guilt) had simply no application to B's case. Thus we resolve that supralapsarian perversion, which so much prejudiced the doctrine of predestination with many moderate minds : "That Esau's guilt or evil desert could not have furnished the motive of God's preterition of him, because, since all fallen men have evil desert, that motive, if operative, must have prompted the rejection of all." Now, the plain reader of his Bible naturally supposes that evil desert is *the very thing* for which a holy God would be prompted to reject a sinner. And we see that the plain reader is right. All fallen men have evil desert. But the hinge of the doctrine is here : In the case of the elect, God has a secret rational motive (which has no application to the non-elect) overweighing the motive to reject presented in their evil desert ; in the case of the non-elect, this latter motive, finding nothing to counterpoise it, prompts its natural and righteous volition, deserved rejection.

This being made clear, we reach our next step by raising this question : Is not compassion for the miseries of his own lost creature as natural to a God of infinite benevolence as moral indignation against all sin is to a God of infinite righteousness ? And when two guilty creatures are suffering similar miseries, equally deserved in both cases, can the divine immutability, consistency, and goodness be reconciled with the belief that the compassion which exists in the one case has not even the slightest existence in the other case ? If this particular position be assumed, then the charge of unaccountable partiality, which the Arminian unjustly casts against predestination, will have

some fair application. Not that either sufferer has a personal right to either compassion or succor as against God. But the anomaly will be this : How comes it that an essential principle of God's nature should act normally towards one object, and refuse the similar exercise towards the precisely parallel object ? This is God's absolute sovereignty, answers the supralapsarian. But a sound theology answers again : No ; while God is perfectly free in every exercise of his essential principles, yet he freely does some things necessarily, and other things optionally ; and God's optional liberty is not whether he shall *have* the propensions of his essential principles, but whether he shall *execute* them by his volitions. The counterpart truth, then, must be asserted of Jacob and Esau. As God had the natural and appropriate affection of disapprobation against Jacob's ill desert (and still elected him) which he had against Esau's ; so, doubtless, he had the same affection, appropriate to his infinite goodness, of compassion for Esau's misery (and yet rejected him) which he had for Jacob's deserved misery. If any compassion for Esau existed in the sovereign mind, why did it not effectuate itself in his salvation ? We answer with a parallel question : Why did not the righteous reprehension against Jacob's ill desert, if any of it existed in the sovereign mind, effectuate itself in his damnation ? All of us have agreed to the answer to this latter question : we dare not say that God could distinctly foresee all Jacob's supplanting falsehood, and feel no disapprobation whatever ; it would come near to blasphemy. We must reply : Because this disapprobation, while existing in the holy mind, was counterpoised by a wise, gracious, and sovereign motive unrevealed to us. Well, let the parallel answer be given to the parallel question : The divine compassion existing towards Esau's misery was counterpoised by some holy, wise, and sovereign motive unrevealed to us ; so that righteous disapprobation for his sin remained the prevalent motive of righteous preterition.

When we say that God's prevalent rational motives in his predestinations are unrevealed, we mean it as to their specific or particular nature. One general fact is revealed as to all these motives, that they tend to God's ultimate highest glory.

The truths which we have attempted to illustrate concerning

the nature of the divine will may be recapitulated thus: Man, when holy, was formed in God's rational and moral image. Holy man's subjective motive for each rational volition is complex, because God's is also complex. This fact must follow from the very infinitude and constancy of God's attributes. The optative and intellectual elements of motive coexist in God's unity in an ineffable manner, to the comprehension of which our finite consciousness is not competent, but which his infinitude renders consistent for him. While God is absolutely free in all the exercises of his essence, his optional freedom, or *libertas meri arbitrii*, is concerned not in his having, but in his executing any given element of his natural propensity; for it belongs to his essential perfection to have all of them, with an immutable constancy and impartial uniformity, the appropriate objects thereof being before his omniscience. While the active elements of his subjective motive are absolutely passionless, yet are they related to his volitions in a divine and ineffable manner, as man's affections are to his holy volitions. And we have shown that this does not clash with his absolute simplicity of essence, or his omnipotence, or his blessedness and divine peace.

The best support to this view is that which the Scriptures themselves give, in that it furnishes an exposition of all the passages declaring God's sentiments towards sinners, which is consistent with their plain, obvious meaning, and which relieves at a touch all the exegetical throes and writhings inflicted on those texts. For if God actually has a state of pity towards the sinner that dieth—although it does not rise to the executive grade of a volition to save him—why should he not say in his word that he has it? It is the exact expression of the state of the case. Washington had a sincere sentiment of compassion for André, which patriotism, wisdom, justice, restrained from the release of the criminal. Why should he not express it? Why should he not permit it to prompt him to send the condemned man comfortable food from his own table, and to protect him from every needless indignity? He would be an impudent caviller, indeed, who should ask, *Cui bono?* or should argue that all these manifestations of magnanimous tenderness were futile or deceptive, because still they permitted the de-

struction of their object. *Cui bono?* Who does not perceive *these* good ends: That the virtue and philanthropy of him who was to be the great pattern of American manhood might have their appropriate manifestation. That the claims of the divine attribute of pity might be illustrated for us all in our provocations by the homage of a Washington. That the unavoidable rigors of war might be mitigated so far as justice allowed. Now, our God is as high above the noblest human ruler as the heavens above the earth. But we see not why this fact destroys the propriety of his glorifying his own infinite goodness in the parallel way: Being omniscient, he is able to hold all the multifarious ends of his vast kingdom, from its foundation to its everlasting future, together in his mind. His government is, therefore, just so much the more a connected whole than that of any wise creature. Must it not follow that there is far more of inter-adjustment in his own views and aims? Among all those countless subordinated aims, the honor of his own character, as infinitely holy, equitable, true, and benevolent, is properly the ultimate convergent end. Hence it is worthy of him, not only that he should so reveal himself as to secure the salvation of the particular objects of his mercy, but that he should so fulfil his legislative functions, irrespective of men's choosing to hear or to forbear, as to clear all his attributes of purity and goodness at once. Just as it is most right and worthy that he should tell men their duty correctly, whether he foresees their obedience or disobedience; so it is most worthy of his truth and benevolence that he shall acquit himself by exhorting men from their own self-destruction, whether they reject or accept his mercy.

But it may be that some still have the idea of futility haunting this representation of God's providence. When we urge the question, Supposing God actually feels, according to his infinite benevolence, natural propensions of pity towards persons whom his wisdom restrains him from ever purposing to save, why may he not give truthful expression thereto in either words or acts exactly expressive of the state of those propensions? they recoil as though we ascribed to God inefficacy. Let it be considered, then, that a given optative element of motive may, by an agent's own wisdom, be self-restrained from what would be its natural end but for that restraint, and yet find an

end in another effectual volition not opposed to that wisdom. Washington was actuated by a real compassion for André. Had he been innocent, the natural outworking of that pity would have been his deliverance from destruction. But from this Washington was self-restrained by his justice and wisdom. Must pity remain, then, fruitless of any appropriate volition? No; there was another end, against which neither wisdom nor justice pleaded, which gave a true expression to pity, the mitigation of the criminal's fate. Propensions thus self-regulated, while actually felt, are then not futile; and their direction to a subordinated end (when what would be their natural end, were there no superior restraining motive, is not willed) displays neither vacillation, change, nor weakness, but the most consistent wisdom. And lest it should be again objected that this picture, however consistent for a ruler of limited powers, is inapplicable to one absolute and almighty, let it be remembered that God is not absolute from the regulative influence of his own attributes; and that however he may have absolute physical ability to indulge every propension of his nature in execution, he may not have the license of his own wisdom and holiness. And that concurrences may arise in his vast commonwealth to prompt him freely to judge so, has such exceeding probability that it would be a rashness almost insane to dispute it.

Let us now represent to ourselves the large number of texts in which God entreats sinners to turn from the ways of destruction. They are addressed by him to all men, without distinction of elect and non-elect. When, for instance, the Redeemer commands us to "preach the gospel to every creature," it is impossible by any exegetical pressure to make the words mean, "every elect creature," because he adds in the next verse (Mark 16:16), "He that believeth not shall be damned." This possible subject is among the "every-creature" body to whom the overtures of mercy are to be made. But no "elect creature" can be damned. Now, no straightforward mind can ever be satisfied that the utterance of entreaties to shun destruction are not the expression of compassion, if they come from a sincere person. The explanations of the gospel calls to the non-elect, which do not candidly recognize this truth, must ever

carry a fatal weight with the great body of Christians. The Reformed confessions do indeed usually teach, with Dort, "Quotquot per Evangelium vocantur, serio vocantur." Some of the theologians, however, neutralize that concession, by applying here the distinction of God's will of *euāpeσtia*, and of *euδonίa*, in a manner which betrays a bondage to the scholasticism we have attempted to expose. That there is a just distinction between God's decretive and preceptive will, no thoughtful person can deny. But let the question be stated thus: Do all the solemn and tender entreaties of God to sinners express no more, as to the non-elect, than a purpose in God, uncompassionate and merely rectoral, to acquit himself of his legislative function towards them? To speak after the manner of men, have all these apparently touching appeals after all *no heart* in them? We cannot but deem it an unfortunate logic which constrains a man to this view of them. How much more simple and satisfactory to take them for just what they express? evidences of a true compassion, which yet is restrained, in the case of the unknown class, the non-elect, by consistent and holy reasons, from taking the form of a volition to regenerate.

There are, again, passages which are yet more express, represented by Ezek. 18:32; 33:11; Psalm 81:13. Here God seems to express a yearning compassion for sinners, whose contumacy and ruin under gospel-privileges are demonstrated by their actual experience. The Calvinist is the last man who can doubt whether the lost sinner of Ezek. 18:32, or Psalm 81:11, was non-elect at the time the divine lament was uttered; for our creed is, that election is invariably efficacious and immutable. What mode of reconciliation remains, then, after the overweening logic has been applied that, since God is sovereign and almighty, had there been any compassion for this sinner, it must have eventuated in his redemption? Can one resort to the plea that God willed that man's rescue with the will of *euāpeσtia*, but willed his damnation with the will of *euδonίa*? The plain Christian mind will ever stumble on this fatal question, How can a truthful and consistent God have two opposite wills about the same object? It is far more scriptural, and, as we trust, has been shown, far more logical to say, that an immutable and sovereign God never had but one will (one purpose,

or volition) as to this lost man ; as a faithful God would never publish any other volition than the one he entertained, but that it was entirely consistent for God to compassionate where he never purposed nor promised to save, because this sincere compassion was restrained within the limits God announced by his own wisdom.

The yet more explicit passage in Luke 19:41, 42, has given our extremists still more trouble. We are there told that Christ wept over the very men whose doom of reprobation he then pronounced. Again, the question is raised by them, If Christ felt this tender compassion for them, why did he not exert his omnipotence for their effectual calling ? And their best answer seems to be, That here it was not the divine nature in Jesus that wept, but the humanity only. Now, it will readily be conceded that the divine nature was incapable of the *pain* of sympathetic passion, and of the *agitation* of grief ; but we are loath to believe that this precious incident is no manifestation of the passionless, unchangeable, yet infinitely benevolent pity of the divine nature. For, first, it would impress the common Christian mind with a most painful feeling to be thus seemingly taught that holy humanity is more generous and tender than God. The humble and simple reader of the gospels had been taught by them that there was no excellence in the humanity which was not the effect and effluence of the corresponding ineffable perfection in the divinity. Second, when we hear our Lord speaking of gathering Jerusalem's children as a hen gathereth a chicken under her wings, and then announcing the final doom of the rejected, we seem to hear the divine nature in him, at least as much as the human. And third, such interpretations, implying some degree of dissent between the two natures, are perilous, in that they obscure that vital truth, Christ the manifestation to us of the divine nature. "He is the image of the invisible God ;" "He is the brightness of his glory, and express image of his substance ;" "He that hath seen me hath seen the Father, and how sayest thou then, Shew us the Father ?" (Col. 1:15 ; Heb. 1:3 ; John 14:9.) It is our happiness to believe that when we see Jesus weeping over lost Jerusalem, we "have seen the Father ;" we have received an insight into the divine benevolence and pity. And therefore

this wondrous incident has been so dear to the hearts of God's people in all ages. The Church has justly condemned Monothelism more than a thousand years ago. Yet, while we are none of us Monothelites, we cannot admit any defect of concert and symphony between the will of the perfect humanity and that of the divinity. It is, indeed, in this harmony of will that the hypostatic union most essentially effectuates itself, "yet without conversion, composition, or confusion." For it is in the will of a rational essence that its unity consummates itself, as the combination and resultant of its prevalent states of intelligence and of activity. The divine and human will was, so to speak, the very meeting-place at which the personal unity of the two complete natures was effected in the God-man.

Some better solution must be found, then, of this wondrous and blessed paradox, of omnipotent love lamenting those whom yet it did not save. Shall we resort to the Pelagian solution, and so exalt the prerogatives of a fancied "free-will," as to strip God of his omnipotence over sinful free agents? That resort is absolutely shut; for knowing assuredly that man is originally depraved and in bondage to sin, we see that the adoption of that theory undermines the hope of every sinner in the world for redemption, and spreads a pall of uncertainty and fear over heaven itself. The plain and obvious meaning of the history gives us the best solution: that God does have compassion for the reprobate, but not express volition to save them, because his infinite wisdom regulates his whole will and guides and harmonizes (not suppresses) all its active principles.

This view of the divine nature also aids us in the many difficult passages where the relation of Christ's design in his own sacrifice to the destiny of all men is taught or implied. At the outset we saw an eminent divine virtually confessing that this is the *crux* of the Reformed theology. The persistent movement of the Hypothetic Universalists among the French Reformed, the laborious tomes written on this subject, and the unceasing attacks of Arminians disclose that fact. He would be a rash man indeed who should flatter his readers that he was about to furnish an exhaustive explanation of this mystery of the divine will. But any man who can contribute his mite to a

more satisfying and consistent exposition of the Scriptures bearing on it is doing a good service to truth.

Let us begin by laying down a simple basis, which all Calvinists will and must accept. The sacrifice of Christ *was designed by the Trinity to effect precisely what it does effect*—all this, and no more. If God regulates all his works by his decree, and is sovereign and omnipotent in them all, then the historical unfolding of his providence must be the exact exposition of his purpose. What, then, are the results which Scripture shows to be effected by Christ's sacrifice? 1. The manifestation of God's supreme glory, and especially that of his love (Luke 2:14; Eph. 2:10, 11). 2. To ransom, effectually call, and glorify an elect people infallibly given to Christ (John 17:6-11). 3. To procure for the whole race a temporal suspension of doom, with earthly mercies, so as to manifest the placability and infinite compassion of God towards all sinners, leave those who are finally impenitent under the Gospel without excuse, and establish an everlasting concrete proof of the deadly malignity of sin in that it infallibly rejects not only duty and obligation, but the most tender and sincere mercy, wherever it is not conquered by efficacious grace (Rom. 2:4; 2 Peter 3:15).

Again, the way must be prepared by pointing out another scriptural truth, by which many minds are confused from lack of due consideration. That it is God's prerogative to propose to himself two alternative results of the same set of means, leaving, in his permissive decree, a certain free agency to man, *and to effectuate both the results in turn*. The wise physician, for instance, gives his patient a medicine, designing, first, to make it only a palliative of pain; or, second, to use it as a part of a treatment for radical cure, in a certain probable turn of the disease. Either end is benevolent. But this supposes a contingency in the physician's prescience whether the disease may take the other turn? Yes; he is a finite agent. But if his prescience were perfect in this case, there might be a condition of things in which it would be reasonable for him to ordain so. The objector may exclaim here: But suppose him omnipotent in the case as well as omniscient! Must not whatever motive prompted action to palliate pain necessarily prompt a radical immediate cure; so that he would pursue only the latter alter-

native? We reply, if we were certain that it was impossible this omniscient physician could have any kind of motive except philanthropy for this patient, yes. That is to say, *to the thorough-going optimist this cavil would have weight*. But, as has been distinctly stated, Calvinists are not optimists. And as soon as the scriptural and reasonable statement is made, that God will direct his whole manifold providence to that set of ends which, as a total, commends itself to his perfections, of the parts of which we know but little, and which certainly includes much else besides the creatures' selfish well-being, we see that it is infinitely possible the Divine Physician may see a sufficient reason for mitigating a pain he does not radically cure, other than conscious inability; and to deny this would be, for a creature, an almost insane rashness. It cannot be denied that God does effectuate both, in turn, of two alternative results, and this without implying in his prescience any contingency or in his power any limit, because he virtually does so whenever he "brings good out of evil." This a moment's consideration will show. Does he not glorify his justice by punishing the evil, after he has overruled it for the good? It is, then, but the application of this method when God makes the sincere offer of mercy through Christ to a Judas first glorify his infinite love and placability, and then, when it is slighted (as was permissively decreed), illustrate the stubbornness of Judas's sin as a deadly voluntary evil, and also God's clear justice in destroying him. This is just what God says he does, under the Gospel (John 3:17-19). But does not God's effectuating the second of the alternative results imply that he could not be sincere in the first? This is the shape in which this obstinate cavil will return on us. Now here the theory of the divine will which we have unfolded gives the answer. No; it does not. It is not necessary to repeat the explanation. It enables us not indeed to comprehend, but to apprehend, how God may be sincere in the first alternative, and, omniscient of its result, may permissively ordain to let Judas reject the mercy, and also be righteous in the latter alternative. Thus, we can take all the gospel declarations concerning Christ's sacrifice to mean just what they express, and we are relieved from the necessity of all tortuous exegesis.

It has been a favorite argument with extremists to urge that because the greater includes the less, therefore a compassion for Judas, which was strong enough to make the sacrifice of Calvary for him, could not possibly stop short of the easier gifts of effectual calling and preservation. Therefore, since God did not actually bestow the latter, he never felt any of the compassion for Judas ; and when he seems to say so, his words must be explained away. We reply, the greater does include the less ; and, therefore, the *loving volition* to satisfy for Judas's guilt must, *à fortiori*, have included the volition to the easier work of his calling and preservation. When this argument is used to prove the perseverance of the saints, from the love of the sacrifice, it is perfectly conclusive. But if the divine nature, like a holy creature, has in some ineffable way propensions of benevolence which are not beneficent volitions, and yet are sincere, then, as to them, the argument is invalid.

We may best exemplify the manner in which the correct view applies by that most important and decisive passage, John 3 : 16-19. Here is the most plausible exposition of it which can be presented on the supralapsarian side. When "God so loved *the world* that he gave his only-begotten Son," "the world" must mean only the "body of the elect :" 1st, Because there is no greater gift that could evince any greater love to the elect ; 2d, Because this chief gift must include all the rest, according to Rom. 8 : 32 ; 3d, Because "the world" of the whole passage is that which God sent his Son (verse 17) not to condemn but to save ; 4th, The foreseen preterition of many to whom the Gospel is offered expresses nothing but divine hatred, such as is incompatible with any love at all.

But now, *per contra*, if "the world" in verse 16 means "the body of the elect," then, 1st, We have a clear implication, that some of that body may fail to believe and perish ; 2d, We are required to carry the same sense throughout the passage, for the phrase, "the world"—which is correct ; but in verse 19, "the world," into which the light has come, working with some the alternative result of deeper condemnation, must be taken in the wider sense ; 3d, A fair logical connection between verse 17 and verse 18 shows that "the world" of verse 17 is inclusive of "him that believeth," and "him that believeth not," of verse

18 ; 4th, It is hard to see how, if the tender of Christ's sacrifice is in no sense a true manifestation of divine benevolence to that part of "the world" which "believeth not," their choosing to slight it is the just ground of a deeper condemnation, as is expressly stated in verse 19. Are gospel-rejectors finally condemned for this, that they were so unfortunately perspicacious as not to be affected by a fictitious or unreal manifestation? It is noticeable that Calvin is too sagacious an expositor to commit himself to the extreme exegesis.

How shall we escape from this *dilemma*? Looking at the first and second points of the stricter exposition, we see that if it were question of that efficient decree of salvation, from which every logical mind is compelled to draw the doctrine of particular redemption, the argument would be impregnable. Yet it would make the Saviour contradict his own exposition of his statement. The solution, then, must be in this direction, that the words, "so loved the world" were not designed to mean the gracious decree of election (though other Scriptures abundantly teach there is such a decree), but a propension of benevolence not matured into the volition to redeem, of which Christ's mission is a sincere manifestation to all sinners. But our Saviour adverts to the implication which is contained even in the very statement of this delightful truth, that those who will not believe will perish notwithstanding. He foresees the cavil: "If so, this mission will be as much a curse as a blessing: how is it, then, a manifestation of infinite pity?" And the remaining verses give the solution of that cavil. It is not the tendency or primary design of that mission to curse, but to bless; not to condemn, but to save. When it becomes the occasion (not cause) of deeper condemnation to some, it is only because these (verse 19) voluntarily pervert, against themselves, and acting (verse 20) from a wicked motive, the beneficent provision. God has a permissive decree to allow some thus to wrest the Gospel provision. But inasmuch as this result is of their own free and wicked choice, it does not contravene the blessed truth that Christ's mission is in its own nature only beneficent, and a true disclosure of God's benevolence to every sinner on earth to whom it is published.

In conclusion, the reader is entreated to take note again,

that this theory of the nature of God's active powers is advanced in the interests of the integrity of Scripture ; and that its result is not to complicate but to relieve the exposition, and to enable the Christian to hold the Bible declarations concerning God's providence towards our sinful race, in their most natural sense.

ROBERT L. DABNEY.

## CLASSICS AND COLLEGES.

IT is not the immediate object of this study to show the importance of the classics in any system of education, the indispensable necessity of them for all higher training. This is a thesis which has not lacked champions, and such is its nature that it is as inexhaustible as the history of human thought and human culture. The phases of the subject must be familiar to all; and it might be as well to take the point for granted, and to ask at once what can be done for the advanced study of the classics in our higher institutions of learning, and not pause to strengthen and widen the old lines of defence, to magnify the importance of the study of the ancient languages as an intellectual discipline, to insist on the æsthetic necessity of classical study, to expand on our historical relations to antique life, and to extol the intrinsic value of antique literature. And yet, at a time when the great masters of the department begin to show despondency, and ask what they must throw overboard in order to save the ship, the question does recur whenever any educational theme is broached: Is the ship worth saving? Is this plea for the classics any thing more than an *oratio pro domo* of a guild of needy schoolmasters, who would be utterly bereft of resource if their occupation should be taken away, and who pass on to their unfortunate successors the dreary watchwords of a hopeless cause? That is hardly the case. It is true that the vested interests of classical study are, even from a mercantile point of view, enormous. Not only teachers but bookmakers have a heavy stake in the fortunes of the classics, and the capital involved in them reminds us of the pecuniary hold of Paganism in the early Christian centuries.

But this is only one aspect, and it need hardly be said the lowest aspect, of the question. The ancient classics are life of our life, as has been well said, not merely money of our purse. A part of our heritage from the ages, they are an indefeasible possession. We cannot get rid of Greece and Rome if we would. The phraseology of Latin is wrought into our mother tongue. The scientific vocabulary of English is studded with Greek words. The whole body of our literature is penetrated with classical allusions. In the *Märchen* of Goethe the will-o'-wisps "with their peaked tongues dexterously licked out the gold veins of the colossal figure of the composite king to its very heart, and when at last the very tenderest filaments were eaten out, the image crashed suddenly together." And some such fate would overtake our higher culture if the golden threads of antique poetry and philosophy were withdrawn. Not only, then, do the traditions of the classic nations encounter us at every turn. That might simply be an annoyance. But they have marked out our course, they have dug out our channels of thought and action. We build on Greek lines of architecture; we march on Roman highways of law; we follow Greek and Roman patterns of political and social life. Not to understand these forces, these norms, is not to understand ourselves.

Nor can we get rid of the ancients by the cheap assumption that we have nothing to learn from them. It is easy enough to repeat the familiar aphorism about the ancients, to say that we are the old and they the young, that we are richer than they by the accumulated experience of millenniums. There are departments of thought and art in which the problems are eternal, the results abiding, the achievements final. The old thinkers have asked questions, the old moralists have laid down rules, the old artists have moulded statues—questions which we repeat, rules which we must accept, statues which we can only admire, which we cannot emulate. Their observation of external phenomena may have been defective. Of that let professed physicists be the judges. It is not an unfamiliar charge. Admit, then, the imperfect character of their observation, not only in physics but in language, and show how narrow was their range, how imperfect their induction. And yet they propounded all the ultimate questions concerning language—questions which

we are grappling with in vain to-day ; and Max Müller, after a wide survey of the field, says that "Plato's *Kratylus* is full of suggestive wisdom ; it is one of those books which, as we read them again from time to time, seem every time like new books, so little do we perceive at first all that is presupposed in them : the accumulated mould of thought, if I may say so, in which alone a philosophy like that of Plato would strike its roots and draw its support." So far as the character and origin of language are concerned, we are little advanced beyond the earliest speculators on the subject ; and while the ancients knew little of experimental science, while they had no proper conception of the right method of putting nature on the rack, nature seems after all to refuse to our severest torture the last secret which the ancients sought to elicit by divination, and while renunciation is often the wisest course as to certain problems, renunciation is not superiority. But this is a direction which it would not be safe to urge. In physical science, as in music, as in painting, the moderns may be supposed to have every thing their own way. "The history of sciences," says Goethe, "is a grand fugue, in which the voices of the peoples come in one by one ;" and he who has no appreciation of the wealth of his own time has no right to speak of the value of antiquity for all time.

In ethics and politics we have had, it is true, the experience of centuries ; but man in his essence has not changed, and in the ethical and political observations of those who stood, as it were, nearer to the nakedness of the soul as their art was more familiar with the nakedness of the body, there is a keenness of insight, a sagacity of counsel, from which we can still learn. "The discoveries of the ancients in science," says Stuart Mill, "have been greatly surpassed, and as much of them as is still valuable loses nothing by being incorporated in modern treatises ; but what does not so well admit of being transferred bodily, *and has been very imperfectly carried off even piecemeal*, is the treasure which they accumulated of what may be called the wisdom of life ; the rich store of experience of human nature and conduct, which the acute and observing minds of those ages, aided in their observations by the greater simplicity of manners and life, consigned to their writings, and *most of which retains all its*

value. The speeches in Thucydides ; the Rhetic, Ethics, and Politics of Aristotle ; the Dialogues of Plato ; the Orations of Demosthenes ; the Satires and especially the Epistles of Horace ; all the writings of Tacitus ; the great work of Quintilian, a repertory of the best thoughts of the ancient world on all subjects connected with education ; and in a less formal manner all that is left us of the ancient historians, orators, philosophers, and even dramatists,—are replete with remarks and maxims of singular good sense and penetration, applicable both to political and private life." Of these, it may be remarked here that Quintilian never fails to surprise the few—and there are comparatively few, including professional scholars—the few who read more than the famous first chapter of the tenth book ; and the distinguished thinker just quoted bears emphatic testimony to the effect produced on his youthful mind by the perusal of the Institutions, and says that he "retained through life many valuable ideas" which he traced distinctly to his reading of him at an early age. We have known mature men of fine intellect and ripe judgment to be astonished and fascinated by the political insight of Thucydides when they returned to him after a long interval ; and Arnold was right when he remarked that the portion of history dealt with by Thucydides is only ancient in the sense that the events related happened a long while ago. "If the reader of the newspaper," says Mr. Crawley, in the preface to his spirited rendering of Thucydides, "will condescend to cast an eye on my translation, he will find there the prototypes of many of the figures to which he is accustomed in his favorite journal. He will discover the political freedom which he glories in, and the social liberty which he sometimes sighs for, in full operation at Athens ; factions as fierce as those of the Versaillais and Communists at Corcyra ; and in the 'best men' of the Four Hundred, oligarchs as self-seeking and unpatriotic as the *gens du bien* of the 'Figaro.' . . . In short, besides the practical lessons to be drawn for his own conduct, he will enjoy the philosophic pleasure of observing how the nature of man, in spite of all change of time and circumstance, remains essentially the same, and how short is the distance from the civilized inhabitant of Athens or Corinth to the dweller in London or Vienna."

It may not be safe to insist on the value of the ancients as types of literary excellence, or to enlarge on the powerful influence of their perfect and finished diction. The value is great and the influence healthy; but, unfortunately, artistic power and the appreciation of art do not always go together, and the classic training of the majority of authors has actually brought the stylistic usefulness of the ancients into discredit in the eyes of those who do not reflect that good models are not every thing, nor even an appreciation of good models. So Mark Pattison, in his clever essay, "Books and Critics," in the *Fortnightly Review* for November, 1877, says: "It is one of the paradoxes of literary history, that in this very country—Germany—which is the world's schoolmaster in learning the Greek and Latin languages, so little of the style and beauty of these immortal models passes into their literature;" and Mr. Spencer cites among his examples of the disproportion of results and appliances the case of commentators of the classics, "who are among the most slovenly writers of English," and asks whether the self-made Cobbett would be guilty of the awkwardnesses of a Queen's speech, or the ploughman Burns or Bunyan the tinker blunder in his diction like the head-master of Winchester or some English bishop whom he cites. The question is a question of faculty, not of training alone; and it is not fair to pick out the exceptional men of genius whose education has not brought them into direct contact with ancient literature, and hold them up in triumphant contrast with those to whom nature has denied, not the susceptibility of form, but the power of classic reproduction. It is certainly claiming too much for the classics to attribute to them the creation of artistic faculty. It is enough to assert their moulding influence when the artistic faculty is there; and it is hardly worth while to notice the theory which has actually been advanced that the slovenly style of the literary class in Germany is due to their excessive study of Greek. So far as the decline of English among scholars is concerned, the large infusion of German in certain leading English journals has much more to do with it than any thing else.<sup>1</sup>

<sup>1</sup>. From the purely stylistic point of view, it is a pity that most of our American philologists, having been trained, if not in Germany, yet under German

The leisurely care with which the foremost men of antique literature elaborated their great works enabled them to attain an artistic perfection which will remain an eternal norm,<sup>1</sup> and the lover of the antique might maintain that they are as unapproachable here as they are confessedly in plastic art. But there the domination of the Greeks is a commonplace. If they made poor work, as Littrow says, of counting the stars even with their clear heavens and the sweep of a wider sky, they saw so clearly and reproduced so wonderfully the play of masculine muscle and the sinuous lines of female beauty, that there have been found men to maintain that such perfection was impossible without regular anatomical studies. It is bewildering to think what their art must have been when the mere mechanical repetition of it in a little Oscan town fills the world with wonder, when the shovel and the pick are revealing every day in obscure corners of classic ground the evidence of a wealth that staggers our imagination. We need not resort to the unearthed glories of Olympia, where we might expect to find the noblest treasures of Greek art. Go to Tanagra. Where is Tanagra? It is a poor town in Eastern Bœotia, and is remembered by the Greek scholar chiefly because of Corinna, by the Greek antiquary because of a famous breed of fighting-cocks,

influences, should be so prone to neglect philological work that is done in France. It is a gratuitous assumption that all Frenchmen are superficial; all can learn from the French, not only in methods of presentation, but in delicate analysis of social conditions, personal character, literary style; and many a French *étude* conveys under a graceful and popular form suggestions of wide scope and deep significance.

<sup>1</sup> In a recent critique on George Sand, in the *Revue des Deux Mondes*, M. d'Haussonville, no blind admirer of the great author whom he is reviewing, says: "Rien ne dure en effet que ce qui est bien composé. Si les formes vieillissent, si les idées changent, les lois de la composition sont éternelles; l'esprit humain, mobile dans ses goûts, est toujours constant dans ses procédés. Les opérations de la logique sont les mêmes aujourd'hui qu'au temps d'Aristote, et les préceptes de rhétorique, qui ont cours dans nos écoles ne diffèrent pas de ceux que la jeunesse studieuse recueillait autrefois sous les portiques d'Athènes et de Rome. Celui qui se fait un jeu de ces préceptes et qui ne sait discerner l'éternelle vérité des lois cachées sur leurs formules arides pourra peut-être surprendre un succès d'un jour: mais il s'exposera à voir couler tôt ou tard sa réputation fragile, comme un édifice dont l'architecte aurait embelli la façade sans en asseoir la base d'après les lois de l'équilibre géométrique."

by the Greek historian because of a battle fought in the neighborhood. Strike into the soil, open the tombs of the dead, and you bring to light thousands of statuettes which breathe the infinite *charis* of Greekdom; and it is said by experts that a new era of "art-industry"—as our German-English has it—is to begin with this find of terra-cottas in a miserable third-rate town of Bœotia, that Bœotia which we have been taught by the quick-witted Athenians to laugh at. It hardly seems quite safe to laugh at the Bœotians.<sup>1</sup>

Inevitable, then, as part and parcel of our own civilization, indispensable as exemplars in those lines of achievement which are peculiarly their own, the ancient classics furnish us, besides all this, with the best gymnasium for the exercise of the mental faculties, as well as the finest theatre for the culture of æsthetic appreciation. But it would be impossible, within the compass of a single essay, even to review the arguments in favor of the disciplinary value of the classics and the classic languages of antiquity; and it is the opinion of the writer that this has been made, if any thing, too prominent in the discussion. At all events, if it can be shown that the classics have an intrinsic value of their own, it will be unnecessary to defend what has been called by an assailant of the classics "the wasteful policy of a vicarious discipline." And here it may be noted that those who have insisted most eloquently on the expulsion of the classics from the *curriculum*, who would bid Greek make way for German and reduce Latin to the smallest possible modicum, are for the most part men who, themselves reared in the atmosphere of classical studies, cannot appreciate the extent to which they are indebted, directly or indirectly, to the very training they despise. The phraseology of our language was fixed by scholars, and in its higher ranges can only be extended by scholars, and if the control exercised by classical scholarship should be forever removed, our noble tongue would become a jangle of false notes or a rattling vulgarity of slang. Like those who tell us that we can now at last afford to dispense with religion, and who point to the noble lives led by men who yield no allegiance to Christianity or even to theistic prin-

<sup>1</sup> Bergk, in his "Griechische Literaturgeschichte," i. 916, has some good remarks on the Bœotians in modification of current views.

plies, these eloquent denouncers of the classics forget that the one experiment as well as the other requires a vacuum, and that the vacuum is not yet; nor can we forecast the time when it will be possible to eliminate the classical influences that permeate every nook and corner of our intellectual domain. Until then it will be in vain to cite personal examples by way of proof that the highest results of modern culture can be attained without the classics; and it will be necessary for the advocates of the new education to make large concessions to the old models, or to throw themselves without reserve into the arms of a brutal materialism. There is really no other course; for it is evident that there is no better school of form than we find in the history, the literature, and the art of the Greeks.

Even Mr. Huxley, in his lecture at the Johns Hopkins University, had something to say in behalf of æsthetic culture, and although æstheticism is not the satisfying portion of man, as an immortal being, such a concession is something as a sign of the times; and it really seems as if some of the devotees of the new education, to use again a favorite phrase, were beginning to feel the danger of the utter breakdown of physical science itself, if the present narrow methods of study be persisted in. The cry of alarm has been raised by more than one voice in Germany. So in a discourse by Emil du Bois-Reymond, the well-known Berlin professor, a tissue of rhetorical generalities about the history of culture and natural science, there are some significant admissions which it may be well to notice. Since the late war with France, it is no secret that the land of scholars has lost much of its attraction in the eyes of scholars, because it has become so strong, so despotic. Brutal is a hard word, but the type of German materialism is the most brutal of all. In old times we might laugh at the provincialisms, the pettinesses, the local patriotisms, the narrower fatherlands, the kinglets and the princelets with their select society of subjects, the minuscule aulic councillors of pocket-handkerchief dukedoms, the upper-court-chimney-sweepers of a microscopic Transparency, the cab-load which constituted the contingent of this or that impotent potentate to the Federal army; but the life of those days had a charm which the new

life has not. The political activity for which the Germans yearned so many years is nothing so glorious now that they have it, and men begin to turn their eyes sadly to the despised past. "Germany," cries our Berlin professor, "Germany has become united and strong, and the wish of our youth to see the German name honored on land and sea has been fulfilled. Who would like to pick flaws in such achievements? And yet, if we transport ourselves in imagination to the rent, poor, powerless, *kleinbürgerlich* Germany of our youth, as it were, out of the cold splendor of the imperial city into the midst of the nestling, cosey gable-roofs of a little town of central Germany embowered in vines and ivy, do we not feel that something is lacking in the present, with its glitter, its intoxication, its tumult? We have got rid of the undefined longing, the unsatisfied endeavor, the corroding doubt of our own power, and with these of much of our enthusiasm for ideals, our unselfish striving after truth, our quiet and deep inner life." And this is but one voice among many voices, which are inexpressibly sad to any one who, like the writer, owes all the best impulses of his intellectual life to the contact with German ideals. Twenty-eight years ago Germany was in deep humiliation, and these lines are written before a memorial of the unhappy Schleswig-Holstein troubles. It is a leaf from the Schleswig-Holstein album, and the design is by Julius Hübner, the celebrated artist of Dresden. It represents a queenly figure, prostrate in the dust, discrowned, unsceptred, abandoned to hopeless sorrow, weighed down by a load of grief and shame, and the legend is from the Lamentations of Jeremiah: "The crown is fallen from our head." It is otherwise now. The grand figure is upright, but the *pickelhaube* is on the head, not the crown; the sceptre is a truncheon, and the features are not the features of Mother Germany, but of Bismarck; and many who sorrowed deeply with Germany's sorrow then, cannot find it in their hearts to triumph unreservedly in Germany's triumph now. All the gold that France has paid, or can pay, were a poor exchange for the treasure of German idealism, unbankable as it is. And the Germans feel it themselves, and if any thing were needed to show this, the frantic revival of metaphysics in Germany would suffice to indicate it. Leading

men are calling halt to their followers, and are deprecating the rash advance of partisan chieftains upon ground over which there once brooded a sacred peace.

The author to whose performance reference has been already made in this paper, and who has given most recent expression to the tendencies of the times, Professor du Bois-Reymond, frankly acknowledges that "where physical science reigns exclusively, the intellect becomes poor in ideas, the fancy in images, the soul in sensibility, and the result is a narrow, hard, and dry disposition, forsaken of the muses and graces, and not only so, but physical science leads down by imperceptible gradations from the highest efforts of human intellect to mere mechanical work that looks at nothing beyond gain."

It is not a pleasant hearing for Americans, who are persuaded better things of their country, to be told by our Berlin professor that this tendency to materialism, this preference of the immediate and practical to the remote and theoretical, in short, all that is hard and realistic and "unbeautiful" in the recent development of life is called Americanism, and that those Americans who do not share these tendencies are simply set down as un-American. And yet the statement is but too true. The German author of a text-book, in reply to the reproach that his work was not sufficiently adapted to the wants of the school on account of the introduction of the scientific exhibition of the forms of the language, pointed with triumph to the fact that his book had been translated in this country, and urged that what the "practical American" found available here would certainly not be found unpractical in Germany. The compliment to the American that American hardly deserved, and it is very certain that he winced a little at the use which was made of his nationality. At all events, the existence of such an organ as this Review, which is surely not dedicated to themes of mere popular interest, is an evidence that there is an element in this country which is not in harmony with the supposed characteristics of our people; and after all, a careful survey of our intellectual life will show that, considering the imperious necessities of our position, there is a large and increasing factor of idealism, and that Americans are in less danger from Americanism than the Germans are. At any rate, the method which Pro-

fessor du Bois-Reymond suggests to meet the case and to stay the progress of Americanism in Germany and restore idealism to its rightful place seems to an outsider amusing, to say the least. Of course he begins with a reform of secondary instruction as the indispensable preliminary to the revival of higher life, and then recommends a modification of the course of study at the gymnasium which shall give more scope to mathematics, encourage the object-method of teaching the classics through pictures and casts from the antique, do away with instruction in religion for the higher classes and with the close grammatical study of Greek; and, finally, to make sure that everybody will understand him, he raises a banner with this device—strange perhaps in Germany, not strange here: “CONIC SECTIONS! NO MORE GREEK EXERCISES!” To an American it certainly seems droll that a German professor should select as the best plan for counteracting Americanism the very course which was almost uniformly followed in the higher classes of American colleges in our youth.

It is hardly worth while to discuss at length this method of saving German culture from the sinister influences of Americanism, and yet it may be not altogether out of place to say a word or two touching the element of Greek exercises, which of late years has been gaining rather than losing ground in our American colleges and high-schools, thanks to the earnest conviction, on the part of our best teachers, that no thorough mastery of a language as a source of culture is possible without the power to use it within certain limits. To insist, for instance, as some English scholars do, on an early facility in the manufacture of Greek verses as a prerequisite to the successful criticism of the Greek drama, is going too far; and yet it is by no means certain that the practice of verse-making has not been too much neglected on the Continent, and the false quantities that are becoming more and more common in text-books mark a decline in exact scholarship that is not an edifying sign of the times. But whatever we may think of verse-making as a school exercise, the command of the grammatical structure of a Latin or Greek sentence cannot be gained in any way so surely as by writing; and when we remember that the language is the truest expression of the life of a people, we shall begin to appreciate

the fundamental importance of an exercise which, as a matter of course, is hardly congenial to the young student. True, antiquity can be approached from many sides, and he is a pedant who thinks that his window alone lets in the light; but all the advantages of Hellenism for higher culture cannot be gained by the study of casts of the Panathenaic procession, or photographs of the Nike of Paionios. It is not sufficient to say that "Goethe and Thorwaldsen could not write a Greek exercise, and yet had a better insight into the secrets of Hellenic art than many who profess and call themselves Grecians." Goethe, for that matter, did write Greek exercises, and it is to be feared that many lads enter college with worse preparation in Greek than is indicated by the Frankfurt schoolboy's efforts at Greek composition. But even if Goethe had written his *Iphigenia* without Greek, as Thorwaldsen made his *Triumph of Alexander* without Greek, such examples have really no application to the question before us. The training we seek in colleges is not for the geniuses of the world, who after all go their own way, but for men of certain average capacity; and, granted the value of a knowledge of Greek, for them there is really no shorter way, we repeat, to a real grasp of the language than a certain amount of Greek exercise-writing. Not that the advantage of a mere reading knowledge of Greek is to be underrated. Too few have that as it is. But Greek and Latin stand on a different footing from modern language. Most cultivated men have a certain knowledge of several modern languages, which they find very useful in a literary sense, even if they are not able to go through the paradigm of the verb successfully, and would utterly break down in the composition of a single sentence. But it is much less easy to penetrate into the subtleties of antique diction without the close grammatical study which reproduction postulates, and while life may be too short and too crowded for the manufacture of Latin and Greek verse where there is no inner vocation, we must erase from our banner the iconoclastic motto, "NO MORE GREEK EXERCISES."

But although our intellectual development is more influenced by the thought of Germany than by that of any other country, our concern in this paper is not so much with the best methods of checking materialism there, as with the prospects of

classical study as an element of culture here; and the outlook is not nearly so discouraging as it might seem at first. It is true that the classical philologists of this country do not appear to have risen yet to the full measure of their duty and their privilege, but there is undoubtedly a notable increase in the number of scientifically trained teachers of the classics, and a higher type of technical scholarship throughout America. On the side of literature, of culture, there has not been the same advance in this country, but in view of the active intercourse between England and America, we cannot overlook the fact that in contemporary English literature there is a far more intimate acquaintance with the spirit of Greek art than can be found at any period of English letters. Indeed, so strong a *ply* has English thought taken in this direction, that forebodings have been expressed lest our faith should be overwhelmed by an Aryan revival. At any rate, the best contemporary poetry of the mother country is saturated with Greek. Tennyson and Browning, Swinburne and Morris, the older and the younger singers of our time, draw much of their inspiration, some of them much of their technic from Greek poetry; and although it must be acknowledged in all fairness that the result is after all exotic, and that this Neo-Hellenic school is too scholarly, too reflective, too consciously artistic, the movement shows that the time is not yet come for the elimination of the classics from the formal education of the college and the larger discipline of the cultured world. But despite all the philological science that comes from Germany, and all the potent influence of English poetry, it does not seem as if we were deriving the full benefit from either element, and it is the purpose of this paper to inquire somewhat more narrowly into the causes, so far as they may be supposed to lie in the present organization of our higher institutions of learning. In a recent address on the failure and the future of American scholarship, the writer of this essay limited himself chiefly to the statement of what he conceived to be the shortcomings of those who represent the classics in this country: the lack of independent research, the wholesale conveyance of foreign work, the limited range of study, the mechanical multiplication of text-books, the want of honest, manly criticism. There may have been bitterness in the tone;

but if so, the bitterness was that of confession, not of satire. It was a *nos consules desumus* from beginning to end. True, it was intimated that the system under which our classical scholars have been working is not the best in the world; but, after all, the moral delinquencies of the instructors themselves formed the staple of animadversion, and perhaps not unwisely. It is best not to portion out faults, as that leads to a fatal easing of conscience. Lay all the blame boldly everywhere. And so this time it may be as well to turn our attention to the sphere in which American philologists are called to work—the colleges of the land. For, with rare exceptions, our philologists are teachers, and teachers under conditions which resemble more or less those of the *gymnasia* of Germany. They are *schulmänner* first, philologists afterwards. That the two characters are not incompatible, is shown by many illustrious examples. Take Ahrens for Greek; take Corssen for Latin. But such men are in the full current of university influence, so far as their higher work is concerned, and that is not true of our philologists. The foremost philologist that this country has ever produced, Professor Whitney, has had to keep his scientific work alive amid a pressure of scholastic duties and a whirl of mechanical engagements, which may enhance our admiration of his steadfastness and his power, which cannot but make us rebellious against a system so exacting, so relentless. This system is so contrived as to sacrifice the teacher to the supposed good of the pupil, and like all such immoral arrangements, injures both alike. A heavy indictment to bring against the traditional methods of our colleges; but there can be very little doubt in the mind of any one who will look seriously into the matter, that our colleges are not promoting the love of the classics in the student, and are not fostering the scientific spirit of the teacher; that the actual contact of the average mind with classic life is less than it was, say twenty-five years ago, and that the best men we have are doing little to push forward the lines of human knowledge in their departments. It seems impossible not to recognize this state of things, and recognizing it, not to seek some remedy. Laudations of the classics, however well meant, are of little avail for the student, and the *contio ad clerum*, no matter how loudly intoned, falls dead on the ear of the deaf or drowsy teacher.

The only hope is the redistribution of the work of the teachers, and that is a theme which has not yet lost all its interest, as is shown by the perennial discussion of the subject in the public press. To this discussion the present writer brings little more than his personal experience and personal conviction, and he has not been at the pains to compile masses of statistics nor to marshal authorities to sustain his position. Statistics can be made to prove any thing if properly manipulated, and as they are valueless when they formulate no organic principle, so they are apt to be too significant when they are significant at all. The toilsome accumulation of facts and opinions to sustain pre-conceived notions may pass with the undiscerning for laborious induction. Here, although use will be made of such statistics and authorities as happen to be at hand, there will be no ambitious attempt to represent the individual impression as the result of long and careful research, nor even of a steady course of thinking on the subject. "*Ich habe nie über das Denken gedacht,*" said Goethe; and the writer belongs to those teachers who have never taught about teaching, whose conclusions as to the needs of the higher education have been forced upon them by the manifest exigencies of the practical problems which they have had to encounter. These conclusions are not new, and yet they may possibly be worth registering as material for a more elaborate exposition of the subject.

It is high time to recognize practically the difference between college and university work, as those terms are or ought to be understood in this country—the difference between the stage of mere appropriation and the stage in which appropriation becomes assimilation, and assimilation results in constructive effort. The *curriculum* must be simplified for the college side; the elective principle must be the norm of the university side. There must be no such incongruous blending of the two as is seen all over the country, so that it would not be hard to point out institutions in which college work is done on university principles and university work is done on college principles. There are things that must be learned by a dead pull, and no amount of scientific presentation will be of any practical avail; and, on the other hand, there are high ranges that cannot be traversed without the discursive faculty.

To attain this end—separating university and college—a thorough reform is necessary. The first step is, of course, the abolition of the old-fashioned four-years' *curriculum*. This is nothing new, for the example was set by the University of Virginia more than fifty years ago, and has been followed by greater and greater numbers as the years go on. Of course, the older colleges which have a history hesitate, and compromise, and modify, and most of them have managed, after a fashion, to make changes without any solution of the historical continuity. But the break must come, however tenaciously the parts may be held together, and for the simple reason that life is not long enough for the demands of the college as now constituted. The current boast about the advance of the standard is an unconscious prediction of the total abandonment of the plan. The various colleges are emulating one another as to conditions for entrance, and thus doing their best to advance the average age of the candidates. It would be invidious to ask how far the terms of admission are complied with; how large a proportion are allowed to make up for deficiencies at their leisure, and whether the passage from the lower to the higher class is everywhere as diligently guarded as the entrance. But, invidious or not, that is not the immediate question. The requirements for admission are so high, or, as Stuart Mill would probably have put it, the preliminary training is so poor, that students now enter college at an age when a very large proportion left it, twenty-five years ago. Even in the last twenty years the average age of the students at entrance has advanced appreciably. So President Eliot says in his annual report for 1874-1875: "The average age of the young men admitted to Harvard has been gradually rising, until it has now reached a limit which had better not be exceeded." "The average age has risen six months in twenty years" (from 1856-1875). "The average age for the last five years has been eighteen years and five months, and the rise of age has mainly resulted from a diminution of the proportional number of those who enter while under seventeen years of age and an increase in the proportional number of those who enter at from eighteen. The present average age at admission is high enough to secure that degree of maturity and of capacity for self-control

which it is desirable that a college student should possess, and the Faculty have no desire to see it rise higher." Recent events furnish a strange commentary on the first clause of the last paragraph, and if age is any security for self-control, it seems as if it would be necessary to encourage students to put off entering college a decade or two longer, until they shall have learned wisdom by repeated contact with police courts during their preparation for college. It is the firm belief of the writer that the recent disorders, which have brought so much disrepute upon American colleges, and have furnished the newspapers of the country with a theme thrice welcome to the national love of humorous exaggeration, are due in good measure to the fact that the discipline to which boys, after boyish resistance, once gracefully succumbed, is, even in its semblance, an intolerable nuisance to young men. But to return to the Report. "The increase in the requisitions for admission to college, which has been going on steadily for many years, has a tendency to raise the age of admission; but all improvements of method in the preparatory schools tend to lower it;" and so it is hoped that the age will not mount any higher, and that a young man will have some five years for professional study, say from twenty-two to twenty-seven. Happy are they who can spend so long a time in preparation; but it is only too evident that this scheme has no regard for the exigencies of ordinary life, and must either limit the advantages of a college course to an increasingly smaller proportion, or shorten the period of special preparation for a profession. And so far as the attitude of the preparatory schools is concerned, it is worth inquiry whether they are not making the lowest margin of entrance into college their chief end, and whereas in former times many of the schools aspired to fit a boy out for life, if he could not obtain a college education, the great aim is now to land the candidates safely within the pale of the freshman class. Make colleges, if you will, of the preparatory schools, and make universities, if you can, of the colleges; but do not keep up the continuity of schoolboy work far into manhood.

Again, it does seem as if even this advanced standard, of which so much is made, were not a superhuman thing after all, and as if, with the boasted improvement in method, a boy of

average sense might be got ready for the best of our colleges before he is eighteen. But whether that be so or not, if he enters at eighteen, he ought not to be kept at college work until he is twenty-two, as a matter of necessity. The *curriculum* should not require four years. It ought to be something that could be managed in two or, at most, three by a student of average ability and application. Every one ought to be at man's work by the time he reaches man's estate.

President Eliot has limited the range of inquiry to the twenty years prior to 1875. The further back you go, the more marked the difference, as an inspection of any biographical dictionary will show. The men of the first half of the century left college at an age when many enter it now. So Harvard sent out Everett and Bancroft and Motley at seventeen, Lowell at twenty; Yale graduated Morse and Woolsey at nineteen, N. P. Willis and Porter at twenty; Princeton graduated Dallas and Bishop McIlvaine at eighteen. Daniel Webster completed his college course at nineteen, Chase and Choate at twenty, W. D. Whitney at eighteen; and examples may be multiplied indefinitely. Of course, the objection will be raised that these are picked men; but it does not follow because they are picked men that they were precocious men, and it is very evident that they represent the average age. At any rate, their success shows that their equipment was not so wretchedly insufficient as it may seem to those who extol the present advance in the standard. Instead of learning routine lessons at twenty-two, they were busy in the great university of life.

In France the difficulty seems to be in keeping the age of the *baccalauréat* up, so that even a reformer like M. Bréal<sup>1</sup> dares not insist on a minimum age of eighteen for the candidates, and France may be left out of the question. Nor need we consult English statistics, as it is abundantly evident that despite the active commercial intercourse between the two countries, Germany has much more weight with us in matters of higher education than England has. Now German students often go up to the university at the age indicated by President Eliot as the average age of the Harvard Freshman;<sup>2</sup> and though the age may have

<sup>1</sup> "Le Baccalauréat Allemand." *Revue des Deux Mondes*, 15 Nov., 1873.

<sup>2</sup> From a list of philologists in Freund's *Triennium*, i., 76 foll., it appears

advanced there also, the advance has not been material, and at the conclusion of their university career the German students are little older than the average of American students when they leave college. In some respects, it is true, the German gymnasium proper does not present so full a course as the American college, as for instance in mathematics and physics, but in other departments the instruction is much more thorough, and very few admirers of American institutions will contend that the same special training can be got in the same time by the American and the German methods, that the American who finishes his *curriculum* at twenty-two is as far on his way in the preparation for his work in life as the German university student of the same age. Indeed, American students, who go over to Germany to complete their studies, often appear as ὄφιμαδεῖς, and any advantage they may have over their German compeers is not the result of the training of the college, but the result of the more liberal life of the nation. A German student as he issues from the *gymnasium* often seems a baby as compared with his American contemporary when he enters college, but measure the two according to attainments towards the close of their college or their university life, and the difference will not be in favor of the American. The demand for early specialization is a dangerous heresy, advocated by men of more brilliancy of style than solidity of judgment; and the importance of a broad and generous foundation for professional study must be insisted on: but there is no valid that F. A. Wolf entered the university at nineteen, Buttmann at eighteen, Schleiermacher at nineteen, Gottfried Hermann at fourteen, Niebuhr at seventeen, Lobbeck at sixteen, Thiersch at twenty, Boeckh at eighteen, Bekker at eighteen, Passow at eighteen, Hand at seventeen, Nitzsch at twenty, Zumpt at seventeen, Reisig at seventeen, Lachmann at sixteen, Stallbaum at twenty-two, Schömann at sixteen, Poppo at seventeen, Osann at nineteen, W. A. Becker at twenty, K. O. Müller at seventeen, Bähn at eighteen, Bernhardy at seventeen, W. Dindorf at fifteen, Lehrs at sixteen, Spengel at twenty, K. F. Hermann at sixteen, Ritschl at nineteen, Haase at nineteen, Haupt at eighteen, Halm at seventeen, Sauppe at eighteen, Preller at nineteen, Forchhammer at eighteen, Schneidewin at nineteen, Bergk at eighteen, O. Jahn at eighteen, E. Curtius at nineteen, Zeller at seventeen, Bonitz at eighteen, Köchly at seventeen, Mommsen at twenty-one, Wattenbach at eighteen, G. Curtius at eighteen, Corsen at twenty, Teuffel at eighteen, Fleckeisen at nineteen, Brunn at seventeen, Steinthal at twenty, Kirchhoff at sixteen, Overbeck at nineteen, Ribbeck at eighteen, Vahlen at eighteen, Bursian at seventeen. To these may be added Lucian Müller at eighteen, Hübner at seventeen, Benfey at fifteen, Blass at seventeen.

defence for the prolongation of what is essentially an elementary course into the years of full manhood.

It is true that the average of human life is longer than it was centuries ago, and that "Old John of Gaunt, time-honor'd Lancaster," would be only in his prime if he were our contemporary; but life is not yet long enough to dawdle away the early years of manhood at a course of study which does not bring any fresh set of intellectual muscles into play, and does not convey any information that is directly useful for the future career.

Now observe the consequence. The proportion of college-bred men is sensibly lessening in the country, and that not to the advantage of society or of government. Men who take a hard, practical view of life will not give up their sons from eighteen to twenty-two, will not suffer them to be cut off from all the valuable connections which are formed at that important period; and so boys who might have had a college training up to nineteen or twenty are put to work at sixteen or seventeen, and the narrow-minded fathers are blamed, and sermons are preached about the worship of mammon and the decline of culture. The old-fashioned *curriculum* had its glaring defects, with its uniform grind for the lower classes and the jumble of all manner of sciences in the upper. This everybody admits. But it was the college life after all that was the main thing, the liberal atmosphere, the contact of fervid minds, the putting forth of untried strength; and while the prescribed college course was a small affair to an active mind, it actually presented points of interest and incitement enough to the better class of students, and the leisure it afforded was not an unmixed evil. A much larger proportion of a man's general reading is done in these early years than is commonly supposed, and that is so important a part of an education that a course of study that exhausts the student's whole time is far from desirable. And this, to be frank, seems to be the great trouble in the system of independent "schools," in those colleges which follow the elective system, pure and simple. Each professor, naturally sensitive for the honor of his department, claims the utmost that can be exacted from his students, and faithful attention to the exercises of two or three such "schools" exhausts the power of the student for mental effort; and the result is a lack of intellectual mobility, a

certain hard, dry, professional habit of mind, a certain attitude which makes every thing appear in the light of puzzle, problem, exercise. Hence the old *curriculum* was not so bad a thing for the boys for whom it was intended. If not blessed in what it did, it was at least blessed in much that it left undone. If it did not make scholars of the highest type, it did not prevent individual expansion. How is it with the new *curriculum*, which is followed by so many grown-up men now? It is certainly much more crowded than it used to be, and the variety of subjects taught, great enough before, is bewildering now. This very multiplicity, however, has made some plan of relief necessary, and in many of our colleges a part of the studies is elective and a certain bifurcation takes place, in some after the Freshman, in some after the Sophomore year, in others according to plans of marvellous complication. Does not this meet the wants of the time? Is not this the true way, this gradual differentiation and specialization? But it would seem—and this must be said with reserve—that this elective work is conducted not in the university, but in the college spirit. It is after all essentially a hearing of lessons, not scientific study, still less personal research. Reading harder Greek, harder Latin, is not university work. Wisely or unwisely, even the preparatory schools occupy much of the hard reading—reading which men like Friedrich August Wolf and August Boeckh maintained should be reserved for the university—such authors, for instance, as Thucydides and Tacitus and *Æschylus*. A few specimens might be given in the gymnasium, says Boeckh, but nothing more. For the proper appreciation of such authors a more advanced age, a wider knowledge of history, is necessary; and some might consider it a positive injury to undertake the wrestling with these intellectual athletes until the muscles are sufficiently strengthened. Still, that may be an over-rigid rule. The hardest authors will always yield some benefit to the younger student,<sup>1</sup> while the easiest will always offer problems enough to the most mature:

<sup>1</sup>In the preface to his school edition of the "Agamemnon," Enger has well said: "Wohl wird der Schüttler nicht Alles nach seiner tieferen Bedeutung zu erfassen im Stande sein, Vieles wird sich seinem Verständnisse ganz entziehen, Manches wird er nur ahnen und als einen später zu hebenden Schatz aufbewahren: allein dies wird nicht blos bei der Lectüre des Aeschylos, es wird bei allen

“Anders lesen Knaben den Terenz,  
Anders Grotius ;”  
Mich, Knaben, ärgerte die Sentenz  
Die ich als Greis nun gelten lassen muss.”

It is not, then, a question of harder or easier Latin and Greek: it is a question of method. It is not a question of more complicated problems in mathematics, or the learning of more recondite laws of physics. It is a question of method. The student should be taken into the workshop of the professor, should see him work, should have the tools put into his hand, and should be taught to use them. In most of our higher classes, if not in all, the mastery of the text-book is the main thing, and, if there are lectures, the lectures are little more than compilations, little more than text-books in the making, or else mere popular discourses, with most of the disadvantages and few of the elegances of the French method, which Von Sybel has characterized so well in his memorable discourse on the German universities (2d ed., Bonn, 1874), a method which Bréal deplores so sincerely in his book entitled *“Quelques mots sur l'instruction publique en France, 3<sup>e</sup> éd., Paris, 1874.”* Bréal admits that, in the higher French schools, the great questions of history and philology are set forth with talent, that new ideas are at once taken hold of and elucidated; but he remarks with justice, that it is one thing to propagate science, another to teach it, and says boldly that the part of a popularizer (*vulgarisateur*), useful in itself, is not that which is proper for a professor; at least, it is only half of his task. The professor should begin the investigation over again, and repeat the work of the originator in order to enable his pupils to continue the discoveries made by their seniors. A point of literary history cleared up by a study of the sources, a text critically studied, an inscription well commented, is worth much more for pupils than any number of brilliant lectures on language, literature, the discoveries at Mycenæ and Olympia, or the latest finds in Attica and Boeotia. True, the American professor, so long as he keeps within the walls of *alten Klassikern und in noch weit höherm Grade bei den neueren der Fall sein.”* That the modern classics are really harder than the ancient, and that the scientific study of modern languages really requires a far more extensive apparatus than that of the ancient, ought to be no secret to any one who has thought on the subject.

his college, is not exposed to the same danger of consulting the tastes of his audience and of catering for a fastidious public from year to year, as is his French colleague; but the same false conception of the academic lecture is apt to prevail. The courses are so short that it is hard to do more than give the results of investigations; there is no incitement to personal research on the part of the instructor, and so the lecture falls very far short of being the powerful instrument it might be for quickening the scientific spirit by scientific example. It does not follow by any means from what is said, that popular lectures, popular in the best sense, do not serve an important end. The masters of the various departments should, from time to time, put themselves into sympathetic communication with the people, but "popular science," as a recent journal has well remarked, "is commonly taken to mean the superficial exposition of results by a speaker or writer, who himself understands them imperfectly, to the intent that his hearers or readers may be able to talk about them without understanding them at all." Popular lectures of this sort ought to have no place in the universe, much less in the university; and no lectures, however "good" they may be, can have a quickening, moulding effect, unless their subject-matter is penetrated by the living, plastic forces of personal research and personal communion with the sources. How many courses of lectures in our colleges come up to this standard, would be an unpleasant question to press. And yet without such lectures, or at all events without exercises of some sort animated by this spirit, there can be no university life. If we are to be forever slavishly dependent on Germany for results, let us acknowledge it frankly and make no further claim to any thing beyond secondary education; but if we can employ scientific methods, where are we to begin the discipline if not in our colleges and college-universities? The physicist will not assert that there is lack of material; the comparative etymologist has a wide field before him, with only a few acres tilled; the student of English has no end of work to do; but the prospect does not seem so inviting to the classical philologist, and the cry goes up that the Germans have occupied all the ground, and even as the wail ascends some German proves that there

is yet room, by doing something of moment that had not yet been thoroughly done. The problem is one which must be faced by every classical scholar who has the perpetuity of his department at heart. As on the one hand the classical philologists must not divorce themselves from general culture, so on the other they must see to it that they do scientific work and have scientific work done, that they live in a scientific atmosphere. Even as an educational element the value of personal research is inestimable; and no one who has seen the rapid unfolding of the powers of the mind under the quickening influence of independent work, the firmer grasp, the more exact knowledge, the more immediate perception of the objects of study, could readily consent to shut up these expanding faculties to schoolboy task-work. And schoolboy task-work is most of that which goes under the name of advanced courses. But still the question will recur: What can we do? How can we find material for scientific investigation in classical philology, such as would be suitable for the students in our higher classes? To answer such a question may seem presumptuous, and yet some answer is demanded; for if an answer be not given, the natural inference will be that the asking of the question is a confession of failure, as indeed the power of originating lines of research is a prime requisite for the university teacher. It is true that the classical philologist in this country is very much hampered by the want of books, as there is not a library in America that would meet the requirements of a wide research. But it must be remembered that good work has been done elsewhere with resources as scanty, and so long as the texts of the ancient authors themselves are accessible, there is enough to do in the way of investigation into the grammatical and rhetorical usages of various writers, into the historical development of the classic languages, into the attitude of the antique mind toward the great problems of politics, of religion, of art, enough in all conscience to keep us busy. All these are problems, it is true, which have occupied the attention of Transatlantic scholars, yet they are all problems the solution of which can be reached by the study of the sources themselves; and the very fact that we are in a measure cut off from the tide of treatises with which Germany is flooded is a

positive advantage, if it only sends us back to the fountain-head. If Americans wish to accomplish any thing in classical philology, they must perforce make independent studies, and the training for this kind of work should begin within the years now ordinarily occupied by college studies.

But while we insist on the importance of an introduction to scientific method in the later years of college life, or as we should prefer to have it, the first years of university life, there is a growing tendency to introduce so-called scientific methods into elementary instruction, of which something should be said before this paper is closed. In a treatise on the Homeric Question published a number of years ago, Georg Curtius warned young teachers against introducing the subject into their class instruction of boys, and it is true that a progressive man runs a great risk of being misled by his own interest in a recent discussion or a new development; and every one who has had much experience in lecturing will recognize the great difficulty of distributing a course properly, owing very much to this temptation to expand on themes which are of immediate personal interest to the lecturer. This disproportion may not do so much harm in a university course, the object of which is to incite rather than to instruct; but in an elementary course there is great danger of overlooking the real object to be had in view. Now there does not seem to be any special peril to the classics from over-abundance of literary speculation on the part of our teachers of junior classes. There are few American instructors who are guilty of enveloping their pupils with the fog of the Homeric Question, or of plunging them into the ocean of debate concerning the Platonic canon. But there is a false method which is becoming more and more popular, one against which it is dangerous to protest, because it is difficult so to guard the protest that it will not be misunderstood. Latin and Greek are to be studied primarily for the knowledge of the life of the Roman and Greek people as manifested in language and literature, and not because Latin and Greek are convenient vehicles for the communication of a certain amount of linguistic philosophy or comparative grammar. Such matters are entirely out of place in the early stages of study. The beginner has to do with results chiefly, not processes; and while these results must not

be taught in an inorganic way, while no known falsehood must be tolerated because of its supposed practical advantages, while regard must be had to the mental training to be acquired by the study of the grammar of the ancient languages, as well as to the more subtle education of the taste, it is a capital mistake to introduce a student into the maze of hypotheses in which the formation of a language is involved before he has any practical acquaintance with the language itself, before he has any insight into the literature for the sake of which chiefly the language is to be learned. Let comparative grammar come in due time. There is no nobler study, and although its ample domain gives large scope to pretenders and sciolists of every degree, no classical philologist will now sneer at its methods and disregard its results. It is only through the comparative study of language that we can get any answer to some of the most urgent problems of classical study, and although it is somewhat disheartening to find the great "world-circumnavigator of languages," Pott, so wofully deficient in English as to construct the following sentence: "I will be drunk; no shall me help," in the fond belief that it meant, "I will be drowned, nobody shall help me," still we are not to be deterred from paying our homage to the genius and learning and thoroughness of many illustrious workers in this department.

But this is not a question of the value of the study, the value of the results, the position of the masters of the science. It is a question of time and stage. An attempt to study one of the classic languages scientifically, as it is called, from the outset must lead to one of two results: either the unhesitating acceptance as proved facts of a number of provisional hypotheses, or the despairing see-saw between conflicting views, which the novice has neither the knowledge nor the experience to control; and it is hard to tell which of these is the worse for the development of the young student. In a science which is making such rapid progress, or rather which shifts its ground so rapidly as comparative etymology does, it is very dangerous to lay down a rule; and it is enough to call a smile to the face of the most saturnine to see the favorite superscription, "Based on the certain results of comparative philology." No sooner is a great point gained than it is at once turned to practical account, and the

new theory is clapped into the grammar before it has had time to cool, which generally means time to shrink. There are results as certain as any thing can well be; although, when we find that it has been the fashion in certain quarters to attack such a pillar and ground of the truth as Grimm's Law, the question naturally arises: What is really safe? What can we state with absolute confidence? It is simply amusing to see the changes that take place within a very few years in the theory of forms, in the theory of phonetics. First the reflexive formation of the Greek middle is announced as a certainty; then, after that has been acquiesced in for a while, the ingenious suggestion is made that the middle is after all not a reflexive, and its terminations only indicate a peculiar differentiation from the active; then the originator of this theory takes it all back and gives an improved edition of the first theory; and finally a sober judge, after a careful survey of the ground, says that the theory is not proved. Look at the theory of the connecting vowel. It is a convenient expression, an apparently innocent expression; and yet many a man has been tempted to wish that he had never been born by reason of the connecting vowel. Is it merely phonetic? Is it originally significant? Vicarious protraction—that is a fine phrase! Vicarious protraction or compensative lengthening explains so many things. Length by nature takes the place of length by position. It is a beautiful principle, this satisfaction made for lost consonants; it leads to profound moral reflections, and is applied with great zeal and zest—where it does not belong. So the old-fashioned explanation that  $\delta\acute{\iota}\delta\acute{o}\nu$  is for  $\delta\acute{\iota}\delta\acute{o}\varepsilon$ , as  $\delta\acute{\iota}\lambda\acute{o}\nu$  for  $\delta\acute{\iota}\lambda\acute{o}\varepsilon$ , is discarded; and we are taught that  $\delta\acute{\iota}\delta\acute{o}\nu$  is for  $\delta\acute{\iota}\delta\acute{o}\theta\acute{\iota}$ , the lost syllable  $\theta\acute{\iota}$  having been paid for by the lengthening of  $\acute{o}$  into  $\acute{o}\nu$ . A few years pass by. Teachers and scholars alike repeat this beautiful explanation, until it is observed that unless the deceased consonants have a certain amount of property, no damages will be paid, and dead syllables, as such, bequeath no claims; and so the old "unscientific" explanation of  $\delta\acute{\iota}\delta\acute{o}\nu$  comes back, but the correction halts far behind the mistake. Comparative syntax is the latest-born daughter of the new science, and not the least attractive; but she is too young to know her own mind on some of the most important points, and the utterance of to-day may be revoked

to-morrow. In short, all this is university work, the essence of which is progress from hypothesis to hypothesis, but it ought to have no place in preliminary instruction. There is a tendency, healthy in the main, to reduce the amount of ratiocination in our grammars, to temper the severe "metaphysics of the subjunctive mood," as it has been called. May it not be time to watch the encroachments of speculation on the exhibition of the forms and their consequent use, and to see that we do not commit ourselves in one year to an original locative signification for the infinitive, which we shall a year or two after sadly retract in favor of the dative, to be followed perhaps in a few months by a judicious compromise between dative and locative? Nor would it be amiss to ask whether the subject of phonetics does not need watching. The proportions which the department has assumed are appalling even to some professed philologists, who find themselves in danger of being disbarred by those who consider it the chief end of a student of language to make himself master of the physical side of speech. All this belongs to the university course, not to the college course proper, and the mischievous effects of anticipating these studies are showing themselves more and more. Vocabulary is sacrificed to etymology, the knowledge of the actual forms to the theoretical genesis of the inflexions, and time which might be spent in gaining a nearer acquaintance with the masterpieces of antique literature is occupied with the deglutition of the last *ragouts* of language-cookery; and the less the mastery of the subject on the part of the teacher or writer, the greater seems to be the desire to make the treatment "scientific;" and so in the plastic age of study the golden opportunity of appropriating the peculiar value of the classic languages is thrown away for the sake of imparting the elements of a science which cannot be taught as a science without going back at least as far as the Indo-European basis of our family.

It does not mend the matter at all to plead that the same tendencies are to be noticed in the German *gymnasia*; that the actual reading of the classic authors is there also made of too little account in the course of study; that there as here the ancients are used more as vehicles for intellectual exercise than as food for mind and heart. It is not the object of

the writer of this paper to hold up the German *gymnasia* as faultless models, nor yet to advocate the unconditional imitation of German universities. Certainly, when thoughtful German scholars like Von Sybel, and experienced teachers like Peter, warn their own countrymen against the false methods that are prevalent there, it were well for us to pause before adopting every new device in teaching that is sanctioned by German authority.

How far the methods of the German university are applicable to our educational life, is a question which it is too late to open at the close of an article already too long, and it is possible that further suggestion may be as unwelcome as further fault-finding is sure to be. In brief, what we want is more thorough conviction on the part of our teachers of Greek and Latin, better drill and less science in the elementary classes, a wider range of reading for literary purposes, a separation of university work and college work in the last years of student life, and a resolute purpose to make an honorable position for the American people in this department of thought and culture as in others.

B. L. GILDERSLEEVE.

## THE MATERIALIST REVIVAL AND THE MIRACLE OF THE RAISING OF THE DEAD.

AS general information upon scientific subjects spreads and becomes more popular, the differences of opinion upon those great questions which, although beyond the range of human intelligence, ever press for solution are brought more and more prominently into public notice.

Sometimes the scientific, sometimes the more religious aspect of a question is presented for public consideration, and the most difficult and abstruse problems are not unfrequently solved over and over again in our periodicals in the course of a few months. It is indeed doubtful if at any previous period in modern times matters of such overwhelming interest to every human being were more vaguely and carelessly stated and commented upon than has been the case during the past year or two.

In this paper I propose to consider whether scientific facts can be adduced in support of the view that miracles were governed by physical law; but I must beg the reader to take particular account of the sort of facts and arguments which have been characterized as *scientific*.

We witness at this time one of the most determined, and as may be shown, most unjustifiable efforts which the world has yet seen to establish materialism upon a basis of fact and reason. This new materialistic revival is essentially the weakest recorded, and would be simply laughed at if intelligent persons would but carefully and critically examine the facts and arguments upon which it is supposed to rest, and not allow their reason to be subjugated or disturbed by the very solemn de-

meanor of its chief exponents. Let the reader only think for a moment what would have become of this new materialism could it have been exposed to the intellectual attacks of Socrates. Its chances would now be little better were it not for the polite indolence of many of the educated classes, for the general dislike of critical analysis, and for the ingenuity and audacity displayed by its disciples in assertion, interpretation, and evasion. It is no uncommon thing nowadays to find such questions as the structure, composition, relation, origin and destiny of man the nature of his consciousness, the question of free-will or necessity, the genesis of man's moral nature, and the probability of a future state expounded, discussed, and definitely determined in an hour's discourse, it may be to working men or women, or done into a magazine article that may be perused in half an hour.

A few months ago a lecture was delivered at Birmingham in which many assertions often repeated during the past few years, but still unsupported by facts, were yet again pressed for acceptance. Did any one in that Birmingham audience, or a single person out of the multitudes who read the report of that lecture in *The Times* next morning really believe that a machine might correctly be "defined as an organism"? Any intelligent schoolboy would take exception to that statement upon the ground that all machines are made in pieces, which are afterwards put together, while no organism can be so made. Even a mere child knows that organisms grow, and that machines do not grow. The action of inanimate machines has been compared with the action of living organisms; but is it not obvious that when men speak of the "life" of a machine and the "life" of a living organism they are using the same word in very different senses? Nevertheless, there is no doubt that many who will not take the trouble to think for themselves do allow their judgment to be influenced by these and many more equally unfounded assertions concerning such questions as man's moral nature and free-will, and allow themselves to be led by teachers who cannot or will not see that the differences between machines and organisms of every kind are absolute.

The public have been assured that human and all other actions of things that live are mechanical; that worlds and

bodies, minds, works, and hopes were once but fiery clouds, and that assuredly to fiery clouds will again return; that men are but automata, wound up for their day, but dependent upon the springs and wheels and levers which have somehow been evolved in their bodies, but which ere long will find their way to the melting-pot, in which they and their forces, their hopes and fears perish, with what is now supposed to be their identity, forever.

No wonder such assertions authoritatively made and repeated again and again shake belief and encourage doubts ever springing up in thoughtful minds as regards miracles and facts which Christians believe, but which have not been explained by law. No wonder such teaching excites and fosters in many minds a feeling bordering upon despair, and tends to destroy the very springs of hope. Upon others, however, a very different effect has been produced. In every new conjecture a new discovery is seen, which is to conduct us towards Universal Unity. Moreover, it has been often suggested that progress is not restricted to science, but that in religion also our views should change and should advance as they change. Progressive divines, anxious not to alienate the intellectual members of their flocks, and animated with a laudable desire to be included amongst the enlightened, discover in the idea that man is composed of matter alone a new and unexpected confirmation of a belief in a future state. In evolution they see the true origin of man by law, and as law necessitates a law-maker, they joyfully accept the new doctrine, and at the same time retain the belief that all things were made by God, and that without God was not any thing made that was made. Though man and monkey rejoice in a common derivation from ancestors whose habits were arboreal, was not such origin preordained? Though man be but an animal, is it not quite clear that he occupies among created things a sovereign position? And though man trace back his origin to preceding lowly forms, is not this particular mode of advance a proof of infinite wisdom, and do we not thus get a grander conception of the divine order of things than is gained by the contemplation of the received account of the creation? Can we not discern in the products of evolution the results of creative foresight, and are we not thus enabled to

carry ourselves back in imagination to that remote evolutional era when causation gave place to law, and matter began to reveal to sufficient intelligences and to privileged spirits its infinite promises and potencies, and became imbued with potentiality of creative force which was to act through the ages and is to continue to act in ages yet to come?

Such are a few of the many suggestions which have been made from time to time in the hope of harmonizing conflicting views, and with the object of showing that if people accept materialism they need not discard Christianity. Though half, and more than half, the attributes of God be denied or explained away, accommodating concessionists suggest that enough, and more than enough, will still remain for the soul's comfort.

But by whom has it been shown that such concessions and such alteration of views concerning the foundations of the faith are necessary for truth's sake? What if it should be found upon careful critical examination that the tenets of the highpriests of the new philosophy are vague and confused, instead of being rigidly exact and clear? What if those who have been over-anxious to modify the old beliefs, so as to adapt them to the new order of things, should discover that they have been misled? What if the progressive theologian should find that the grand generalizations upon which his progressive theology has been founded are not, as he was led to believe, based upon demonstrative and demonstrable facts and experiments and observations made, repeated, and confirmed, but upon mere visions, dreams, and imaginings of brethren who affirm themselves to be so very scientific and so very strong that their conjectures must certainly prove infallible? Is there no danger that the spirit for accommodating, unreasonably indulged, may lead men to abandon important principles, or to modify them without sufficient reason? Is there no danger that, after having been drawn first in one direction and then in the opposite one, after having accepted confused and irreconcilable doctrines, men may find themselves carried along by the current more swiftly than they thought possible? Too late they discover that after all it is impossible to reconcile materialism and Christianity. What is to be done? Will they agree with Strauss

and, following his example, confess that they and all upright persons must acknowledge that they are no longer Christians? And what then? Will they join this sensitive and upright and conscientious critic, who laughs at Heaven but believes in the "slimy heap of jelly" dredged up from the bottom of the sea?

Now, no one can fail to be struck with the spectacle of unreasonable scepticism and reckless credulity developed in the writings of Strauss, who, like many others, zealous in the same cause, seems to have been ever ready to regard the most obvious scientific blunder as a new discovery and absolute truth, if only it seemed to furnish any thing like an argument in favor of materialism. But the idea of faith being destroyed and miracle annihilated by the harmless mud dredged from the sea depths, and dignified by the name of *Bathybius*, is ludicrous indeed.

That such was to be the case, however, seriously thought Strauss, and so thought many more. But alas! *Bathybius*, instead of bridging the chasm between the organic and inorganic, and instead of being an "apparition of life" in its crudest form, turns out to be composed principally of dead matter and other ingredients. The term *Bathybius* being therefore no longer required for the sea mud, may henceforth be properly applied to the lowest depths of unfounded conjecture and other contents of the materialistic slough.

Let me now pass to the consideration of some of the phenomena occurring in the living state of matter, preparatory to discussing the main question.

That every living thing, be it organism, particle, or molecule, must die, is one of the very few facts that must be accepted without any qualification. Centuries of experience and multitudes of observations and experiments testify to the further conclusion that every form of living matter which has died remains dead, and cannot by any means yet discovered by man be caused to return to the living state. Revivification, that is, restoration to life, of matter some time after death has actually taken place, is scientifically impossible.

The instant death has occurred, the relations of the material particles that were alive become altered, and very soon the elements are so rearranged that chemical compounds result

which are totally different from any thing actually present, or that can be supposed to be present, during the living state. That living matter which had undergone the changes consequent upon commencing chemical decomposition should be restored to life, should in any form be caused to live again, may not only be pronounced to be impossible from the scientific stand-point, but inconceivable. Nevertheless, every Christian believes that this very change, which is admitted to be scientifically impossible, has actually happened, and upon more than one occasion.

Christians believe that the dead have been raised to life, but not by the exercise of any ordinary power, not in obedience to any ordinary law. But as many high authorities have affirmed that all phenomena are governed by inexorable physical law, it is not surprising that some who do not desire to be behind in their philosophy try to persuade themselves not to believe at all in any thing they cannot fully understand, or which cannot be adequately explained to them, or that they should feel sure that, ere long, proof will be afforded that the raising of the dead, like other phenomena, occurred under the operation of some as yet undiscovered law of nature. Can any other conclusion be accepted in presence of the unhesitating confidence displayed by numerous infallible authorities who preach the inexorable, the certain, the unchanging operation of law?

Nevertheless I shall venture to offer the suggestion that as the raising of the dead has not yet been *proved* to be within the range of physical law, it is *possible* that this and many other phenomena not yet brought into the category of physics, may be outside it or beyond it.

The raising of the dead is either a miracle or it is not, and it seems more reasonable to regard it as a miraculous event as long as it remains as certain as it seems to be at this time that matter that has once died cannot be restored to life by any means known to us, or by any process we can think of.

That there are some who would believe in miracles if the phenomena could be shown to be governed by a physical law, and removed entirely from the category of miraculous events, there can be no doubt; and if a physical explanation could be given, it is thought that many a scientific soul, racked by the

dread of the supernatural, and perplexed by the many phenomena which seem beyond or above those characteristic of ordinary matter, would be comforted. It may seem cruel to object to an alteration of our views concerning miracles which would be so advantageous, but unfortunately miracles constitute but a very small group of phenomena which have not been brought under physical law.

The Dean of Westminster has truly remarked that as regards the subject of miracles there is "an increasing difficulty," and that the miracles have become "stumbling-blocks and not supports" in the eyes of the very men "we most desire to convince." It would appear that there is great danger that many will entirely give up their belief in miracles if miracles are still regarded as of supernatural origin; but it is believed that if another view, more in accordance with the tendency of modern thought, could be agreed to, people would accept in a modified form the truth of certain facts hitherto regarded by the faithful of all ages as miraculous. It is thought that with the spread of natural knowledge the difficulties will increase, and that unless we are prepared for a falling off in the number of those who profess to be Christians, and that in an increasing ratio in each succeeding generation, the views hitherto accepted with regard to miracles must be modified.

Whether belief in such a miracle as the raising of the dead constitutes an essential part of Christianity, and as to the particular articles of belief which may be given up or presented for acceptance in a modified form, and precisely the extent to which these may be altered without detriment to the faith as it has been handed down to us, are questions upon which I am not qualified to offer an opinion.

That concession regarding certain beliefs would enable some who are not now Christians to embrace Christianity seems probable; but whether the old order of Christians could be educated up to the point of being able to discern in the new Christianity the principles they had accepted and the promises they treasured above all things in the old, is a question which does not appear to have been determined.

If miracles were the only difficulty, the only stumbling-block, a reasonable excuse would have been found for the ten-

dency manifest enough on the part of some of the clergy to modify their views concerning the nature of miracles; but it is obvious that much, very much more than the question of miracles is really at stake. Were our views as regards miracles changed by common consent, many more and as great stumbling-blocks would be discovered, and for every one that was cleared away a new one would be found to take its place. Already the yielding, accommodating spirit has been carried to such lengths by some, that men will find it no easy task to discern what remains for further treatment by the modifying and accommodating process. A few enthusiasts appear to have been already so overwhelmed by the dazzling conception of universal subordination to physical law, that they seem to have made up their minds to yield entirely to the teachings of the new philosophy, and to change as it changes. The opinions that these changing, modifying—it may be progressive—tendencies have gone far enough, or too far, and that too much of the truth has been already sacrificed by some, and that there is little left worth fighting for or preserving, are not without some foundation in fact. Instead, however, of considering these or other views, however worthy and weighty, it seems preferable to study somewhat carefully the fundamental facts and arguments and conjectures which have contributed to excite the doubts, the vacillations in belief, and the changes in religious thought with which we are becoming familiar, and which are supposed to justify change in our views concerning the nature of miracles, or to render it imperative.

I shall therefore ask the reader to accompany me a little more into detail, while I try to describe as clearly and as simply as I am able the phenomena which occur in living matter, which any of us who may possess the requisite knowledge, patience, and skill may investigate for himself. After having taken careful account of what we know, and of the methods of inquiry we are able to follow, I think the reader will be in a position to judge concerning the probable advantages likely to be gained by a discussion upon the nature of the minute changes which must have occurred when such a miracle as the raising of the dead was performed, and so form some estimate

of the value and importance of the doctrine that miracles were governed by physical law.

The points I shall consider are precisely those which a man who has been thinking and working, so to say, upon the scientific side, naturally desires to bring under the attention of the public at this time, and my desire to do so has been enhanced by the circumstance that a distinguished theologian has recently expressed the opinion that the "molecular phenomena" of such a miracle as the raising of the dead probably operated under some law of the physical world.

I propose to inquire, in the first case, what we understand by the phrase "molecular phenomena," when applied to the changes occurring in ordinary living matter, as this consideration ought clearly to precede the discussion concerning the exact meaning of those words when used in reference to events regarded as miraculous, which happened more than 1800 years ago.

Molecular phenomena, it is affirmed, occur in matter that is living as well as in matter that is not alive, but no one has proved that the molecular phenomena of *living* are of the same kind as the molecular phenomena of *non-living* matter; but as I shall endeavor to show, accurate observation leads to the inference that the two sets of phenomena are quite different from one another and are in their very nature distinct. The molecular phenomena of solids, liquids, and gases, those of crystallization or precipitation, of chemical decomposition, the molecular phenomena of heat, of light and electricity, of magnetism, have been most carefully studied, and much has been discovered concerning them.

But the "molecular phenomena" of living beings, of cells, of the anatomical elements of the brain, of living matter, of life, the "molecular phenomena" occurring in differentiation, in fibrillation, in tissue formation are spoken of as if they were the same kind of "molecular phenomena" as those which occur, say, in crystallization. Not only are the phenomena which occur in living matter unlike any physical phenomena whatever, but it may be regarded as certain that the purely *vital* molecular phenomena belong to an order totally different from that which includes physical molecular phenomena. There is no

true analogy between crystallization and the change of non-living matter into living matter, or the state which exists when the latter ceases to live, and it is a mere parody of scientific argument to attempt to prove that any analogy does exist.

In spite of all that has been urged concerning the nature of molecular changes, we shall find that there really is much yet to be discovered in connection even with the very elements of the subject. Any one would naturally infer that "molecular" implied molecules, and he would suppose that it would not be difficult to define what is meant by a molecule, and to state in what respects a molecule of living matter resembled or differed from a non-living molecule. But what sort of thing is a molecule—any molecule? Is it visible? Can it be discerned by ordinary mortals, or has it been seen only in the imagination of privileged machines? Is it hard, solid, impenetrable, divisible or indivisible? What is its size and figure? But let us take, if only we can catch it, a particular molecule, say of iron, and let us ascertain, if we can, the exact differences between the simple molecule of iron and the molecule of rust of iron. But this last contains at least two things, iron and oxygen, as we say, in combination. Are these to be regarded then as two molecules, or as one molecule composed of two elements, and if so, let us inquire of the physical philosopher concerning the relations to one another of the two molecules. And further, we must ask him to tell us by what means we are to distinguish simple from compound molecules, and to explain to us in what respects the molecular phenomena of simple elements differ from those of compound bodies. So far I have not been able to find any one who could give me sufficient answers to these questions; nor have I yet discovered any one who could show me a molecule or tell me exactly what he meant when he used the term molecular as distinguished from the term molar—save that the difference was one of degree. Whether any one has seen a molecule of any kind of matter, I do not know; nor am I sure that the molecule is more substantial than metaphor.

But we are now more particularly concerned with the living molecules, and I am not aware that any one pretends even to have formed a conception of the nature and character of these.

One thing is quite certain, we cannot isolate a single living

molecule or separate it from combination or cause it to combine. I am unable to form any conception of a living molecule that is incapable of being divided, nay, of dividing itself into smaller molecules ; nor is it possible to form a notion of the limit of divisibility of a living particle. Now it must be carefully borne in mind that every particle of living matter, however minute, is compound and consists of more than one substance. *A living simple element exists not. Life cannot affect a particle of oxygen, hydrogen, or nitrogen any more than a particle of iron or sulphur can be supposed to be capable of existing in a living state.* The most minute living molecule must be compound ; but of the relation of the several elements to one another in the living matter we know nothing, nor can we hope to learn much, seeing that when we come to analyze the living particle we at once destroy it, and then have only the matter that results from its death, not the living matter itself.

Next, concerning the rising from the dead. Before we can advance much in our consideration of the molecular phenomena of dead matter being restored to the living state, we have to determine whether it is more reasonable, and more in accordance with the knowledge we possess at this time, to regard the fact as dependent upon the operation of physical law or to the exceptional and overwhelming influence of the divine will.

Have we any accurate conception of the exact changes which occur when inanimate matter becomes living, and when living matter dies? Without such information we can hardly consider ourselves in the possession of data upon which to build an hypothesis concerning the changes which ensue at the moment of revivification. So far we feel sure that matter cannot be made to live unless it be taken up by, and actually incorporated into, the very substance of matter that is already alive. No known mutual interactions of the molecules of matter or their forces suffice to call life out of non-living matter, or to restore to life the particle which has once died. It is conceivable that matter and its forces might exist, but, nevertheless, remain inanimate for all time.

Nothing has yet been discovered in connection with any form of matter to justify the conclusion that the power of living was conferred upon it with its other characteristics ; and no

one, from a knowledge of the properties of oxygen or hydrogen, or carbon or nitrogen, could have premised that these elements would specially enter into the formation of living matter, before he had discovered by actual investigation that they were to be found.

If any one disputes this, let him say why certain elements are less fitted to constitute the matter of living bodies than others, and why potash salts, for example, are preferred by one kind of living organism; soda salts by another. Can he tell why iron enters into the composition of the red blood-corpuscle? Really, from the conjectures that have been offered, one would have supposed that, from the properties of iron, an intelligent chemist would have been able to inform us that this metal must exist in red blood-corpuscles; but, like oxygen, it was discovered by analytical examination; not affirmed to be present by reason of its ascertained properties, or long ago discerned in the blood by some unknown method. Nevertheless it is maintained, and I have no doubt will continue to be maintained in spite of important facts and evidence of various kinds which have been repeatedly urged against the doctrine, that matter alone develops life. "I discern in matter the promise and potency of life," says a former president of the British Association for the Advancement of Science. This statement has been widely spread and much discussed, and, though probably received by very few thoughtful persons even as a very slight approach towards the truth, is calculated greatly to mislead until it is formally and publicly withdrawn; for it cannot be considered that the admission by the author that it was not in "hours of clearness and vigor" that the doctrine of Material Atheism commended itself to his mind, was a withdrawal of the assertion that he discovers in matter "the promise and potency of all terrestrial life."

This and many other assertions have, without doubt, influenced the minds of many as regards the great questions we are considering. But we must not allow ourselves to be too much biassed by mere authoritative assertions. Dr. Tyndall has not told the world whether the discerning power to which he lays claim is peculiar to him and a few privileged spirits, or whether

ordinary mortals may be anyhow taught to discern promises and potencies.

Matter alone cannot be made to live. Matter already living is invariably required to impart to non-living matter the vital properties and powers it manifests, and without itself losing any of its powers. From a living particle so very small as to be invisible if made to appear fifty thousand times larger than it really is, life may, so to say, spread to non-living matter, so that, and in a very short time, many pounds weight of lifeless matter may be made to live.

And now in conclusion a few words on the general question.

From the remarks which I have made, the reader will have doubtless drawn the conclusion that not only am I obliged by the facts of the case to maintain that no scientific facts have yet been adduced to warrant the disregard or condemnation of the views generally adopted concerning our Lord's miracles, but that I cannot even allow that, with any show of reason, we can adopt any distinct opinion concerning the question whether the raising of the dead was or was not due to the operation of physical laws, and for this reason: a number of matters of great scientific importance, and which lie, as it were, at the very root of the inquiry, have not been cleared up or definitely disposed of.

To me it appears perfectly useless to consider what might have happened, or what did happen, when the dead were raised up, while we are not agreed as to the nature of the actual changes constantly proceeding in the living matter under our eyes, and forming part of our own bodies, or the phenomena which immediately precede death, or which occur at the moment when a particle of this living matter dies. Some persons argue as if every thing ought to be sacrificed in the hope of procuring peace, and take infinite pains to make it appear that absolutely irreconcilable views differ from one another only in degree, or try to persuade us that the differences in opinion are due to the mode of interpretation of the facts, or even to the peculiar feelings and emotions of those who entertain them. Utterly conflicting and incompatible doctrines are to be harmonized on the ground that there is truth in all, and that

there is "good in every thing." It is difficult to see how a compromise is to be effected, for example, between scientific men who maintain that man is a machine, and those who consider that no living thing is in any essential particular like any machine whatever. One would suppose that in such a case one view must be right and the other wrong—one true, the other erroneous. But it seems to be maintained by some that many scientific statements are neither true nor false—that a sort of half belief or provisional belief may be enjoyed with respect to many things which people used to be taught to believe faithfully and with all their strength.

Sympathy for materialistic propositions seems to be sometimes excited by the cry of "Pity the poor, ill-used materialist." We are assured that it is more reasonable to believe that such and such things were gradually developed from one another, and that the modifications observed were slowly and gradually produced, than that each different specific form was specially created; but those who accepted this "reasonable," this common-sense view would be called "evolutionists," and, remarks Professor Huxley, "there was not a worse thing!" Must we accept the doctrine of special creations or one particular form of the evolution theory? Why, already, how many different forms of evolution theories do we find? Darwin's evolution, Owen's evolution, Huxley's evolution, Haeckel's evolution, Mivart's evolution, and many more; nay, as time goes on we shall probably find evolutionists diverging from one another in as great a degree as some diverge from certain forms of the special creation hypothesis. Progressionists in faith seem to think that progress in religion is to be furthered by somewhat the same methods as those which are adopted for promoting scientific advancement. Observation and experiment seem to them to be as applicable to discovery in one field as in the other. Nay, discoveries in science are not unfrequently spoken of as if they were revelations of the same kind or order as the revelations in revealed religion. But the word is used in two very different senses.

Progress in science is assured by observation and experiment; but how, it may be asked, can these or any other human devices lead to an advance in Christianity, or add in any way to the per-

fect actual and ideal that was attained for once and for all time—can there be an advance as regards perfect God and perfect man?

But to some of us it seems that the earnest and religious of different schools are too much absorbed in trying to realize the highest aspirations of spiritual thought, to give attention to the elementary questions concerning law and God, which agitate men's minds at this time. Leaders in religious thought give themselves up to the contemplation of the delicate refinements of spiritual life, or are too much engaged in working out the minute details which, according to some, constitute an essential part of public worship to consider these things. Such men appear blind to the fact that self-constituted chiefs of a philosophy neither new nor true are trying their very utmost to make people acknowledge that for Infinite Power, Wisdom, and Goodness we must substitute Law and Fate, and that the God whom our fathers worshipped has been by modern philosophic discovery reduced to a mere phantasy for fools to lean upon. Or the attributes of God are one by one ignored, denied, or explained away till Infinite Power, Wisdom, and Goodness, Omnipresence, Providence, Guiding Sustaining Power vanish altogether, or are but dimly discerned in the far-off Deity scarcely to be discovered in the ever-thickening mists raised by thoroughgoing evolutionists.

I can only venture here just to hint at the ambiguity that hangs about the word "law" in the many different senses in which that word is used. Think of the kinds and qualities of law—the laws that must be obeyed and those that may be broken—the inexorable laws—the permissive laws—the laws operating through all time, and the laws that become modified by other laws as time goes on—laws that are paramount, and laws that are controlled by or subordinate to other laws—God's laws—Nature's laws—physical laws—vital laws—laws particular—laws universal, and many more.

Now to consider briefly but one of the so-called laws, brought to light in our own time: Who has not heard of the law of "The survival of the fittest?" but who has discerned in that law more than the announcement of a fact, or rather a supposed fact? Is it not a fact that creatures of all sorts and of

opposite qualities have survived in the struggle for existence, if there has been such struggle? The strong and the weak, the swift and the slow, hard and soft, clever and stupid, light and heavy, active and sluggish, black and white, transparent and opaque, and so on:—all these and many more we are assured are the *fittest* to have survived. This, then, is what it all comes to: The creatures that have survived are the fittest *because they have survived*, and they have survived *because they are the fittest to have survived*—such is the fact, if it is a fact; and the law, if it is a law. But I venture to suggest that the advocates of the new law have yet to point out the particular characters which have rendered those creatures which have not survived *unfit* to have survived. So far no evolutionist appears to have considered this very important part of the general question.

What is there, we may ask, to induce a being who can think, to love, honor, or obey in that undemonstrable, unknowable abstraction, destitute of power to ordain, create, design, or change, which it is now the fashion to call *law*? Can *law* love or be loved? How can *law* forgive us our sins? What hope of peace or rest is offered by the contemplation of *law*? Fancy a little child saying its prayers to *law*, or a grown man putting trust in blind, passive, unintelligent and unalterable *law*. What a consolation to the sick to be assured that their illnesses are due to *law*, and how comforting to the unfortunate person experiencing exquisite pain to be assured that in obedience to *law* certain nerve-currents are taking the course of a right-handed spiral instead of painlessly spiralling towards the left!

And now comes a consideration of the greatest practical importance. The clergy have been told by very high authority that their great duty “at this period is to contend against infidelity.” Shall I be considered too presumptuous if I submit that, in order to carry out this injunction, the exact nature of this infidelity ought to be ascertained, and the causes of its revival and spread carefully sought for? Perhaps, after all, the infidelity may be found to be of the weak and contemptible sort, an absurd rather than a serious form of infidelity, a form of infidelity that may be dissipated more effectually by a little gentle critical dissection than by too serious and solemn treatment, or by the thunders of anathema. May it not then

possibly be the wiser as well as the more rational course to take: To inquire concerning the dicta and arguments advanced in favor of infidelity, to examine them carefully, and sift thoroughly the facts which are supposed to justify them, rather than simply to condemn and to preach against things which some at least suppose to be founded upon truth? Surely the first course is likely to be of more use than an attempt to qualify or modify the views upon which materialism is supposed to be based; and more advantageous to other people than it would be to assume a shocked or deplored attitude, or to sigh at the power and success of the Evil One. What if it turns out after all that the infidelity of our time rests upon absurd conjectures and groundless assertions?

But if, on the other hand, the views favoring materialism be founded upon fact and truth, they will certainly spread, and their reception by the thoughtful is only a question of time. And let it not be supposed that I would, in the slightest degree, support those who would impede inquiry.

The tendency of much that I have written will have been misinterpreted if any one has been led to think that I am not ready to go any lengths, if only I have the support of facts. Nay, I would stake all and dare all. I may shock some by the confession that my belief would be shattered if the means of making a living particle even less than the one ten-thousandth of an inch were discovered.

Such an admission will perhaps lead many to mistrust me altogether; but I cannot help that. I feel perfectly safe in my view, and I make the avowal without the slightest misgiving, for if the faith runs no risk except in the event of that contingency, it is, I am confident, secure indeed; for is not the suggestion of the possibility of the production of such a particle as monstrous as it would be to pronounce as possible the formation of a living man direct from the lifeless elements of which man's body is composed?

Whether Christianity is to be advanced by changing the views concerning some of the so-called stumbling-blocks, such as the miracles, it is not for me to decide. Whether it is the duty of men supposed to be thoughtful and religious to modify, ignore, or despise the conclusions accepted and cherished by

the best intellects the world has produced in the course of many centuries, in order that they may be made to fit in with, or, at least, not clash with the mere dicta of authorities skilled in framing conjectures, is a question in the settlement of which not a few among the laity as well as the clergy—and not only of this country (England)—will probably insist upon having a voice.

What I now venture to submit to my readers' serious consideration is this: Whether, instead of defending the faith, it might not be the better and the wiser course to attack those who are assailing it. Instead of defending religion, the right course, as it seems to me, is to attack materialism. Instead of deplored the spread of infidelity, to expose the absurd fallacies continually put forward in the name of science, but utterly unscientific. Instead of trying to determine exactly how much may be conceded and modified without altogether abandoning Christian belief, we ought to dissect and analyze the ridiculous propositions some suppose to be sufficiently cogent to subvert truth.

It is not for me, taking up the subject from the scientific side, to say one word in defence of religious truth; but I may without hesitation express my conviction that the main arguments adduced by materialists against religion will scarcely bear thoughtful examination. Many of the more recent observations are very audacious, but that is all. Of the so-called *facts* upon which some of the arguments are said to rest, many are not facts at all, and the less said about them the better. Still, I suppose that some who disbelieve entirely in religion could clearly state the grounds of their unbelief; but I am sure that many who have discarded religious belief because they fancied that materialism was true, or because they believed and desired that it might turn out to be true, have been misled or have deluded themselves into the belief that certain things are demonstrable and true which are neither. Such persons have unquestionably accepted doctrines as true which can be clearly proved to rest upon erroneous and unsound data only, and have abandoned what, at any rate, has not been and cannot be demonstrated to be untrue.

I am aware that in this paper I have gone further in attack-

ing some materialistic doctrines than several distinguished theologians will consider discreet or justifiable. Many may possibly concur in this opinion ; but it must be borne in mind that in the remarks I have made I have not permitted myself to be influenced in the least degree by the consideration of expediency. I have simply stated what I believe to be true, and have recounted the facts and arguments which have influenced my judgment, and I think I might have gone further along the same lines of thought than I have done, and yet have found myself in company with fact and observation, following closely upon reason, and thoroughly supported by truth.

LIONEL S. BEALE.

## THE SON OF MAN.

A HUNDRED years ago a distinguished company of eminent men, most of them decided antagonists of religion and Christianity, was assembled in a drawing-room in Paris. Again, as it was customary in that circle, Holy Scripture had been the general drudge ; from all sides the sharp and envenomed arrows of mockery being aimed at its seemingly weakest and most vulnerable points. At once one of the boldest among these free-thinkers, the famous Diderot, rose from his seat, and, to the general amazement of the company, in a tone which put a stop to the discussion, uttered these remarkable words : "All right, gentlemen, all right ! I am ready to declare all of you are clever writers and competent judges, and few in France or abroad would be able to speak or write better than you do. But still, notwithstanding all the evil we have just been saying about this accursed Book, and which no doubt serves it right, still I think I might defy any of you to compose a historical tale so ingenuous and at the same time so sublime, so touching and fit to produce such a deep and lasting influence for centuries to come, as the gospel relation of Christ's suffering and death." No wonder, indeed, an unwonted but most significant silence followed this quite unexpected utterance in Baron de Holbach's *salon*.

Wherefore, it may be asked, this anecdote as introduction to a new research concerning that vital question for Christian truth and conscience, "What think ye of Christ ? Whose Son is He ?" For this reason too that it reminds us how unbelief itself can be urged to acknowledge the undeniable greatness of our Lord, and how, this being the case, Christian faith must

never relent when called again and again to account for its heartfelt conviction. More especially in our days the Lord asks his disciples, “Whom say ye that I am?”<sup>1</sup> and more than ever it is avowed by those most competent to judge that Christology is the very central point in the whole doctrine of truth and salvation. But it cannot be denied, the answer to this question has been rendered far more difficult in consequence of the position the negative criticism of our century has taken with regard to most of the sources from which that is to be drawn. This, to be sure, would be relatively easy, if the authenticity, trustworthiness, and divine authority of the four Gospels and of the Apostolic epistles were universally acknowledged; the main question would then of course be restricted to a mere *exegetical* research. It is well known, however, how utterly different the state of things actually *is*, as not opinions only, but the very principles themselves are irreconcilably opposite one against another. That the written word of the New Testament ever and anon sides with supernaturalism, and clearly states the Godhead of Christ, no honest unbeliever will even try to deny; but he will not therefore be ready to confess that this testimony of Holy Writ may be relied upon as a testimony to truth. The days are long gone when there was an end to all discussion by merely stating: *Γέγραπται*: “It is written.” That these things are written, unbelief itself knows full well; the question remains whether that which is written be considered as truth.

This being, the interest and importance increases of the inquiry *whether we are able to ascertain something about Jesus Christ as duly averred*, derived from sources which must be acknowledged as authentic and authoritative by ALL contending parties; and if so, *to what appreciation of the Saviour's personality the investigation of those unsuspected sources must lead*.

To this question we are going to seek an answer in the subsequent pages. Voluntarily we desist from making use of such weapons, the virtue of which is not in the least doubtful to ourselves, but which are deemed worthless or antiquated by our antagonists. We will not exclusively pay attention to testimonies against which no man of science can afford any thing essen-

<sup>1</sup> Matt. 16: 15.

tial ; and if, then, it appears that, even on the ground only of *these* indubitable testimonies, a quite unique place must necessarily be ascribed to Christ, then—but we do not wish to anticipate on the final result of our investigation, desiring to enable every one to judge for himself on a question which to all Christians is of the highest import.

I. First of all, it lies on our way to trace such sources as are to be found *beyond* the precincts of Christianity. So we ask if we can get some information concerning Jesus' person and history anywhere outside the biblical reports. An extravagant unbelief united with the grossest ignorance will indeed go so far in our days as to regard even the fact of Jesus' historical existence as highly dubitable. Therefore we have to recollect immediately how heathen authors of undeniable authority have not merely roused the certainty of Jesus' existence, but the historical importance of his life, beyond every shadow of doubt. Even if we knew no other testimonies than those of Tacitus,<sup>1</sup> Suetonius,<sup>2</sup> and Lucianus,<sup>3</sup> they would be quite sufficient to certify, that with regard to this history we do not stand on the moving legendary sand of poetical fiction, but on the firm and living rock of well-founded historical truth and of the most sober and earnest reality. From Tacitus we learn at least this, that the so-called Christians took their name from *Christ*, who, during the reign of Tiberius, was sentenced under Pilate, whilst Lucianus mentions expressly his crucifixion. He calls Jesus, "the great man who was crucified in Palestine ;" and elsewhere, "the crucified Sophist, who had been the author of a new religion." What mighty impulse this "crucified Sophist" has communicated to the religious life of his age appears more indirectly, but with the more evidence, perhaps, from that curious passage in Suetonius, where he mentions "the Jews rebelling in Rome on the instigation of Christ" ("*Judæos, impulsore Christo, Romæ tumultuantes*")—an utterly erroneous statement of course, but in its inaccuracy itself bearing a most remarkable testimony to the personal influence ascribed to that so-called Sophist, and in its very mistake showing the unmistakable

<sup>1</sup> Annal. xv. 66.    <sup>2</sup> In Claudio, cap. 25.    <sup>3</sup> De morte Peregrini, c. 11, 12, 13.

vestiges of historical truth. All these testimonies are most emphatically, though involuntarily, supported by one of the oldest and fiercest antagonists of Christianity, Celsus, who speaks about Jesus as the Founder of Christianity, and makes several allusions to his doctrines, deeds, and fate, and especially to his death and resurrection. But enough already to justify the German poet Wieland's saying to Napoleon I., who, when the Emperor jeeringly spoke, "I do not believe that Jesus Christ ever existed," answered without hesitation, "Then, Sire, I may quite as well deny your own Majesty's existence." The one indeed is as thoroughly proved as the other.

Of much higher importance still is the often quoted witness of the Jewish historian, Flavius Josephus,<sup>1</sup> the authenticity of which must be accepted on external and internal grounds, though it has been probably interpolated by a later Christian hand. It is now generally believed that the author must have written in the original text as follows—that which seems to date from a later period we place in parentheses and signalize by italics: "In those days lived Jesus, a wise man (*if we may call him a man*), for he perpetrated several extraordinary works (*as a teacher of those who gladly accepted the truth*) and made many Jews and heathen his followers (*this man was the Christ*). When Pilate had condemned him on the accusation of our most prominent men, those who first loved him did not forsake him (*for he reappeared to them living, on the third day, as the Divine Prophets and thousands of wonderful prognostications had predicted before*). And to this day the sect of Christians, called after his name, has not died out." This, trifling as it may appear, which remains after taking away the probable interpolation, has still a very great weight indeed, as it gives an indubitable testimony to the wonderful character of Jesus' personality, calling him a perpetrator of extraordinary (uncommon, miraculous) works ( $\pi\alpha\rho\alpha\delta\circ\xi\alpha\ \xi\gamma\rho\alpha$ ), thus confirming and explaining the above-cited words of heathen writers. In Philo, it is true, we do not find any mention made about Jesus, and in the Jewish Mischna very little; but even the calumnies to be found there against him, and in the later Gemara against his mother, do prove this at least, that the

<sup>1</sup> A. T. xviii. 3, 3. Compare 5, 2, xx. 9, 1; D. B. J. vi. 5, 4.

account about his miraculous conception and immaculate birth was then generally known.

From Paganism and Judaism now turning to Mahometan testimonies, we hardly feel surprised that communications about Jesus are very scarce in the Koran, and those few signalized by the grossest ignorance. The four gospels themselves appear to have been utterly unknown to Mahomet; this is certain, he cannot seriously have examined them, though he may have got a certain vague and defective knowledge of the main truths of the Christian creed. John the Baptist he mentions as the Precursor of the Lord Jesus, and Issa himself he calls, "the Messiah," born in a miraculous way, "a prophet often wonderfully supported by the Holy Ghost," "a man who worked several miracles," once healed a blind-born man, has cured leprosy, raised the dead, and lastly ascended to heaven, whilst his enemies erroneously thought that he died on a cross." The Prophet of Mecca indeed leaves us far more of the divine in the gospel history than a certain so-called Christian theological school. Still, of course, no real elucidation of the sun's bright daylight can be expected from the fading rays of the pale half moon.

A modern theologian in Germany, Fr. Keim, as the final result of his critical researches, lately gave the Saviour this encomium, "That Jesus may indeed be said to have excelled most of us common men *from the shoulder upward*"—like a Saul among the other Israelites. We might ask, I think, if the impartial trial even of those non-Christian testimonies we have been quoting, would not lead to the acknowledgment of a far higher minimum than this. A Jewish rabbi, who, notwithstanding the offence of the cross, has made such a deep and lasting impression on the Jewish and heathen world, and in a short time masters both of them by his word and spirit, must necessarily have occupied a much higher position than modern Naturalism assigns to him.

II. In this conviction we are strongly confirmed, when—leaving still aside the New Testament itself—we pay our attention to the testimonies of *Christian antiquity* of the *first two centuries*. Like the glowing evening sky after the sun's setting bears witness to the far greater splendor of the already vanished

globe, so it was after Christ's death with the primæval Church. Most remarkable, indeed, is the frequent mention in the first centuries of the Christian era of occurring miracles most positively ascertained by such men as Justinus Martyr,<sup>1</sup> Irenæus,<sup>2</sup> and Origenes.<sup>3</sup> This extraordinary faculty of working miracles existing in the old church, seems a legacy of the same power which, according to the statement in the undeniably authentic Epistles, the apostolic age possessed even in a higher degree.<sup>4</sup> About the miracles worked by Jesus himself, we find a highly interesting statement in a fragment Eusebius has preserved from one of the very first apologists—Quadratus of Magnesia, who, when addressing the Emperor Hadrianus, says this : “ The works of our Saviour were visible and evident to all ; these works were the healed and the risen from the grave ; these were not merely witnessed then, but years afterward, being present amongst us long after the Lord himself had gone, *so that even some of them were left until our own days.*”<sup>5</sup> Against the trustworthiness of this remarkable assertion no valid objection can be alleged, and Celsus himself, the first heathen author who wrote against the Christians in that early period, does not even try to deny the miraculous power of Jesus, but merely endeavors to explain it by the supposed assistance of the Evil One.

But we must strive to get a more broad and general review of the state of things in that early epoch of Christianity. This we discover at a single glance : the spirit of a new life has gone over the valley of death. It is true the Jewish and Pagan world still continue the old ways and customs ; they are not essentially altered ; still there are the old dreams, illusions, manners, but there is a new light which begins to appear and to break through the darkness ; something, it is felt, is internally changed ; a new moral and religious power is forcing its way, which the world henceforth shall have to take into account ; a new and fresh faith has conquered thousands of hearts in three

<sup>1</sup> Dialog. cum Tryph., I, 2, c. 39, a. 82.

<sup>2</sup> Contra Hær. L. 5 ; 6 L. 2 : 32.

<sup>3</sup> Contra Cels. I. c. 2, 46, 67 ; II. c. 87.

<sup>4</sup> Rom. 15 : 18, 19 ; 1 Cor. 12 : 9, 28 ; 2 Cor. 12 : 12 ; Gal. 3 : 5 ; comp. Heb. 2 : 4.

<sup>5</sup> See Eusebius, H. E. iii. 37 ; comp. iv. 23.

parts of the world. Its disciples still move most in the quiet of darkness ; in catacombs and caverns they hold their gatherings ; but in that dark soil the seed of life germinates and takes root powerfully though unseen. In some respects as to creed and worship, these early Christians already differ ; but one name hovers on all lips, a name praised with deep affection and admiration, nay, with thankful adoration. They are baptized by one baptism ; they join at one eucharistic table to glorify the same death for the release of sinners, and as long as the oldest of them can recollect, they have come together to worship on the first day of the week. Why precisely then ? Because they are all firmly convinced that He, after whose name they are called, on that day bodily left the grave, and because this to them all was a fact of such predominant weight, that the Jew disregarded for its importance his holy time-honored Sabbath, and the heathen vowed the day of old called after the sun to the glorification of Him, who was the true Light of the World. If we ask what these Christians were doing then, when assembling together ? Already before, or in the year 110, Plinius can report to the Emperor Trajanus, " that the Christians were accustomed to sing hymns to Christ *as to a God* ; " <sup>1</sup> and some existent remnants of the oldest Christian art confirm this statement in a very striking manner. On a monument of Christian antiquity dating from the period of the Antonines, we discover in the midst of a religious assembly a virgin holding a lyre, to the tunes of which she is apparently singing a hymn.<sup>2</sup> Of the probable tenor of such hymns, we may easily form an idea. The words read in Eph. 5 : 14, " Awake thou that sleepest and arise from the dead, and Christ shall give thee light" — in the original showing the shape of a well-metred verse — most likely form the beginning of the very oldest church hymn already used in the days of Paul. Moreover, we possess the celebrated " canticle to Christ" mentioned by Clemens Alexandrinus, dating, it may be supposed, from the second century. In this hymn Christ is glorified as " the all-reigning Word of the Father on high."

<sup>1</sup> "Quod essent soliti *stato die* ante lucem convenire, carmenque Christo *quasi Deo*, secum invicem dicere." — Epist. Plin. x., 97.

<sup>2</sup> Comp. I. A. Dorner, " Entwicklungsgesch. der Lehre von der Person Christi," i. s. 291 ff.

Again, on a great many old monuments we see the lyre in the hands of Orpheus, surrounded by wild beasts, who are charmed by his music, a representation of Christ soothing the passions by the harmony of the gospel, and restoring the golden age by his miraculous power. Then again and again we encounter the *fish*, a much beloved emblem, as the five letters of its Greek name, *Iχθύς*, form the initials of five words : *Jesus, Christ, God, Son, Saviour* ; and already in this period everywhere we see his cross occupying a prominent place among the Christian symbols. More especially the tombs of the early Christians speak of the eminent rank his disciples ascribe to him. On a funeral monument in Africa, restored in the third century, and thus originally from a much older period, a deceased Christian is designed as *Cultor Verbi*, “Worshipper of the Word.” There is more still. The excavations in Pompeji have in our days brought to light scoffing jests concerning the Christians, scribbled rudely on the walls (the so-called *griffissi*), as, for instance, “(i)gni gaudi, (C)hris-tianæ,” meaning to mock a Christian, who is to be burnt at the stake.<sup>1</sup> So, too, the old nicknames of *sun-worshippers, cross-adorers, ass-reverers*,<sup>2</sup> with which the Christians were often insulted in the second century, indirectly show that a divine honor was generally attributed to Christ by his followers. Already at the beginning of that century, Ignatius called himself *Christophorus*, bearing the Christ in his heart, and the disciples, “believing in Christ,” as they preferred to be called, used to devote to his name an adoring homage. All these things are facts which no criticism can ever annihilate, and prove most surely that at least the original monuments of the highest Christian antiquity utterly contradict the bold assertions of modern naturalism.

But there are things more stringent and decisive still. We can afford testimonies of contemporaries, friends, and co-operators of the apostles themselves, not leaving us the least doubt

<sup>1</sup> Compare T. Overbeck, “Pompeji in seinen Gebauden,” u. s. w., 1866, s. 115.

<sup>2</sup> A very curious caricature, roughly sketched on the wall, was discovered in the ruins of the emperor’s palace in Rome. It represents an ass hung on the cross, with a man worshipping at its side, with the inscription *Αναξαμενης σεβεται τὸν Θεὸν—Anaxamenes adores his God*. Most likely a Grecian soldier of the Imperial Guard has traced these lines and words to play a joke at one of his comrades.

about their opinions. If we listen to Clemens Romanus—the same most probably about whom mention is made by Paul, Philipp. 2:3—and whose first epistle to the Corinthians was written before the end of the first century, according to some even before the destruction of Jerusalem—we hear him speaking in a tone of equal reverence, both of God and of Christ, calling the latter “the sceptre of God’s majesty,” whose descent on earth was “a deed of voluntary humiliation.”<sup>1</sup> He alludes emphatically to the Saviour’s pre-existence, honors him above all angels, and acknowledges in his crucifixion the cause of our salvation. In constant concordance with Paul, he is clearly conscious that he has no other gospel to bring to the Corinthians save that the great apostle of the heathen himself had preached. No other spirit manifests itself in Ignatius (x. 117). Of the seven epistles ascribed to him, at least the shorter text may be regarded as surely authentic. With great fervor he resists the denial of the Saviour’s human nature, but with no less force that of his divine character. Christ is obviously to him the centre of the whole revelation; already under the old covenant, Christ was “the door to the Father, through which Abraham, Isaac, Jacob, the prophets and apostles, have entered; the eternal “*Logos*, invisible, but manifested and made flesh for our sake.”<sup>2</sup> And when Ignatius died on this confession, very soon after the voice of Polycarpus is heard, wishing to the Christians “the grace of God *and* of our Lord Jesus Christ,” ever and again uniting Christ’s name with that of the Father, and confessing him as the Son of God, manifested in flesh.<sup>3</sup> With these explicit confessions the whole spirit of their writings corresponds. It is clearly apparent everywhere that these men adore Christ, that they live in him, and stand with him in a communion of soul and spirit, such as cannot exist with regard to any mortal man. It would be easy to quote equally memorable words from Hermas and Barnabas, the friend of Paul; and if I aimed at completeness, I could not pass under silence Justinus Martyr, whose Christology bears the same supernaturalistic stamp. I prefer, however, to mention one of the most beau-

<sup>1</sup> Ep. ad Cor. c. 16.

<sup>2</sup> Ep. ad Phil. c. 9; ad Magn. a. other pl.

<sup>3</sup> Ep. ad Philipp. c. 1, 7.

tiful monuments of old Christian literature, a "patristic gem," as it has not unjustly been called. I allude to the celebrated letter of Diognetus, written most likely in the first quarter of the second century by a disciple of the apostles, without any special dogmatic tendency, nevertheless wholly penetrated by the same supernaturalistic view of Christ. Here, too, he is called "the only begotten Son, the Word, in whom God Himself came to men, who was from the beginning, and is now manifested." Likewise in the oldest of the so-called Sibylline books, which originated from Jewish Christians, the coming of Christ is announced as that of "the eternal and immortal God."<sup>1</sup> What do we want more? In truth, everywhere, to what side we glance, we behold the Light beaming forth in glorious rays, though surrounded sometimes by clouds. There have been such as pronounced Jesus to be a mere produce of his time, and Christianity nothing but a natural fruit grown on Jewish and heathen soil; if this were really the case, we might ask: Whence then the unnatural and extraordinary phenomenon that this supposed daughter was persecuted by her mother already in the cradle? Whence the hatred with which the Jews from the very beginning raged against the followers of Christ, if, as it pleases Baur to say, Jesus had been nothing but "the first Ebionite," who died on the cross, like a Socrates drank the cup, a martyr of his own doctrine, but nothing more? Then, indeed, the oldest church was better informed. In a letter written in the year 177, the Christians in Smyrna, speaking of the martyrdom of their bishop Polycarpus, say, "Christ alone we worship as the Son of God; the martyrs we love as his disciples and followers."<sup>2</sup> But how should we come to an end, if we were to gather all the testimonies of divine honor given to the Saviour in the old Christian church? And let us not overlook this: all these voices, a few only of which we have been listening to, do not come to us from an occult or remote corner of the world; they come from the great centres of life, culture, and science in those days—from Rome, Asia Minor, Alexandria, Greece; they speak to us out of the oldest writings and resound through the vaults of the catacombs. Why,

<sup>1</sup> Comp. Dorner, a. a. O. I. s. 243.

<sup>2</sup> Euseb., H. E. iv. 15.

then, should we hesitate to subscribe the word of a scholar,<sup>1</sup> who has devoted his time and zeal to a most thorough examination of this subject : "The old church deserves with the fullest right the name of a witness to the human but not less to the divine nature of Christ, whether we look at its literature or its liturgy, its festivals or its art. Notwithstanding all mutual difference, the oriental and occidental churches all agree in that conviction of the Godhead of Christ which *was* the apostolic faith, and *is* ours still!"

III. "Which *was* the apostolic faith . . . ?" "But even this remains the question," somebody might infer. "Already the oldest church has gone beyond the simplicity of the original apostolic instruction. You allude to writings as the Acts and the Epistles. But you know, no doubt, nearly all of these are spurious."<sup>2</sup> "Nearly all?" Well, let it be so. For a moment we will take this as granted. But even according to the most negative critics, some monuments at least of the apostolic literature are of undoubted authenticity. Now, then, let us look at these alone, in order to see what *they* have to tell us about the genuine *apostolic testimony* concerning the Son of Man.

Designedly it is the *last* Bible-book to which we turn first our attention. The boldest criticism itself never doubted the apostolic origin of John's Revelation, and has even fixed its date at early as the year 68 or 69 of our era. Leaving here aside the question whether this supposition be right, we only wish to ask now : In what light did John place the personality of Christ? In the very introduction of this book, Christ is called "the Faithful Witness, the First-begotten of the dead, the Prince of the kings of the earth."<sup>2</sup> These names already would have more than a scent of idolatry, if the apostle-prophet had acknowledged in the Lord nothing but an eminent man. No wonder, indeed, that theologians of the most "extreme left" were forced to avow that John here looks at the Master "in his *exalted state*," in the glorified light of Israel's crowned Messiah and King; but is it possible in truth to keep us on this standpoint, when we consider and join the different features of the

<sup>1</sup> Dorner, a. a. O. I. s. 295.

<sup>2</sup> Rev. I : 5, 6.

image of Christ as depicted in the book of Revelation? Is it nothing, perhaps, that Christ is announced with quite the same names, which are commonly used of God, that he is called "Alpha and Omega, the Beginning and the End, the First and the Last,"<sup>1</sup> and elsewhere "the Amen, the Beginning of the Creation of God; the Faithful and True; the Word of God; King of kings, and Lord of lords"?<sup>2</sup> Is it nothing, when he speaks of *his* God in a quite special sense, when he receives and accepts in the temple of heaven the incense of an adoration, which is expressly denied in the same book to the highest of angels?<sup>3</sup> No wonder, indeed, that a more impartial adherent of modern views was urged to the avowal, "Certainly we must acknowledge that in the Revelation Christ is elevated equally to God Himself."<sup>4</sup> In our days it has become a kind of fashion to sustain that the supernaturalistic representation of Christ is the result of a later theology; but how, then, these words of John, written thirty or forty years after the death of Jesus? Is it likely that a strict monotheistic Israelite, however zealous of his Master's honor, could have used such expressions, if he did not really consider him as participating the divine nature and majesty? And how, besides, could he reasonably expect for these expressions a sympathetic echo from his first readers, the Christians in Asia Minor, if he had not been conscious that his conviction was in the main points theirs too? So it is quite clearly evinced what the general belief of the Christians concerning the person of Christ was in those early days.

There is more: the same faith in the same days of primæval Christianity may be traced not only among the Asiatic Christians, but even among the Jewish, of whom it is generally asserted that they stood, on the whole, on a lower, more Ebionistic stand-point. For this fact we have a witness in the Epistle to the Hebrews, evidently written before the destruction of Jerusalem and its temple. The author of this letter not only renders homage to Christ as "the brightness of God's glory and

<sup>1</sup> Rev. 22:13; comp. 1:8.

<sup>2</sup> Rev. 3:12-19, 11-16.

<sup>3</sup> Rev. 3:2, 12; 5:8; 19:10; 22:8, 9.

<sup>4</sup> E. Reuss, "Hist. de la Theol. Chrét." i. p. 346; "il faut reconnaître sans hésiter que Christ dans l'Apocalypse est élevé au niveau de Dieu."

the express image of his person,"<sup>1</sup> but urges, from the beginning to the end, as emphatically as can be done, the divine nature of Christ. And—this especially must not be overlooked—nowhere it appears that there exists any discrepancy of opinion between him and his readers. He does not argue his views, but merely reminds others that which they might possibly forget, though they had known and confessed it before. According to this document, the confession of Christ's divine nature must have belonged to those "principles of the doctrine of Christ" (Heb. 6:1), which were accepted by the Jewish Christians, and can therefore not have been a produce of the second century, as modern naturalism affirms ever and again. If we do not urge this point any more, if we leave the Epistles of Peter, John, and Jude altogether aside, it is because we now wish to use merely those weapons the validity of which is not even contested by modern criticism. These already, few as they may seem, are utterly sufficient victoriously to withstand the fiercest assaults of our antagonists, even when we restrict ourselves to the undeniably authentic words of the Apostle Paul.

It is generally known that the Tübingen school, amongst the thirteen epistles ascribed to Paul, only acknowledges *four* as really authentic: those to the Romans, Corinthians, and Galatians. The adherents of this school take it for granted that those letters have been written between 55 and 58 A.D., about twelve years before the Revelation of John. Some of the Tübingen scholars, by more recent investigations, have been brought to acknowledge the authenticity of two other Epistles, that to the Philippians, and the First to the Thessalonians; very likely they will go further back, when once the fever of negation has somewhat remitted. But let us rest contented with the first mentioned four. We do not want any more. Being rich enough by what must be conceded to us, we can afford to be liberal. From this quadrilateral of strongholds, no enemy will be able to dislodge us. We take first the oldest of the four apostolic letters, that to the Galatians, and behold! the very first word is, "Paul, an apostle not of men, neither by men, but by Jesus Christ." So he calls himself in the first verse of

<sup>1</sup> Heb. 1:3.

the Epistle to the Romans, "a servant of Jesus Christ," and never certainly Paul would have called himself a servant of any man, even if this had been a Moses or a Socrates. But we would have to peruse the whole of these four writings, were we to indicate all the expressions by which an answer is given to the question, how Paul, the indubitably genuine Paul, the man of philosophic mind and highly cultivated standing, judges on the nature of Christ. To set forth one thing at least: the apostle evidently discerns in the Lord a higher, divine nature, differing from that which he has in common with all other men,<sup>1</sup> and he honors him as "God's own Son, which God sent into the world, in the likeness of sinful flesh." To Paul, Jesus Christ was most truly a man, but descended from heaven, and now participating in the majesty and glory of God, whose names and properties he often indiscriminately ascribed to Christ.<sup>2</sup> According to the apostle, Jesus Christ is the living Divine Being, who still sees and hears us, who is willing and mighty to succor his followers; he invocates him in need,<sup>3</sup> and shows thereby that he thinks him omnipresent and almighty. And this man, who on every page of his writings glorifies Christ equally with God himself, can certainly not be reckoned among either impostors or fanatics. Every new research of his life and work makes this only the more apparent: here we have a personality, a conversion, a devotion never to be explained without a supernatural agency and influence. This to every impartial eye is as clear as daylight itself; and Paul's whole life will remain forever an unexplained enigma, if indeed of Jesus, the great David's Son, nothing else could be said than has been said of the patriarch David himself, "that he is both dead and buried, and his sepulchre is with us unto this day."<sup>4</sup> Paul's whole life is an undeniable argument for the Divine nature and exaltation of the Lord, a witness far easier ignored than refuted. Before taking leave of the great apostle, we must fix the attention still on two more special points.

We allude *first* to the strong and stringent proof of *the*

<sup>1</sup> Rom. 1:3, 4.

<sup>2</sup> Rom. 8:3, 4-32; 1 Cor. 13:47. Compare my "Christology of the New Testament," translated by Prof. G. E. Day, 1871, p. 182.

<sup>3</sup> 2 Cor. 12:8, 9; comp. 1 Thess. 3:11.

<sup>4</sup> Acts 2:29.

*Lord's bodily resurrection on the third day* the apostle has given in that most remarkable and indestructible fifteenth chapter of the first epistle to the Corinthians, a testimony of the higher value, when we consider how that which was written there about the year 57 had been already personally preached by him some years before. "Delivering," according to his own word, "unto those of Corinth that which he also had received" himself earlier still (1 Cor. 15:3), so that we see ourselves brought back here to a period only a very few years posterior to the memorable event itself, about which even unbelief has been compelled to confess, "nothing but the *miracle* of resurrection could overcome a doubt, which would have doomed faith itself to the night of an eternal death."<sup>1</sup> Indeed, if the subject were not too serious, it would be almost amusing to notice the skilful but neck-breaking performances by which so-called criticism and text explication—this last often more implicating than explicating—have tried to escape the pinch of pressing arguments, and could merely succeed in proving the impotence of their own despondency.

In the *second* place, I must refer to the surprising light Paul's well-known representation of Christ as the "second Adam" throws on the relation of the miraculous conception and supernatural birth of our Lord.<sup>2</sup> It is often asserted that Paul seems to know nothing about that wonderful event, mentioned by Matthew and Luke alone. Leaving aside here that which could fitly be opposed to this assertion, I now only indicate the logical consequence resulting from the apostle's often repeated antithesis between Adam and Christ. According to Paul's doctrine, sin and death come from the first Adam to *all* his descendants without any exception. How now *can* He, from whom flows a quite opposite stream of life and salvation, possibly have sprung from the first by mere natural derivation; *must* He not necessarily be regarded as a new sprig, grafted by a supernatural act and fact on the old unsound stem?

I mean now to have sufficiently demonstrated that the superhuman character in Jesus Christ has not merely been ex-

<sup>1</sup> F. C. Baur, "Das Christenth. und die Chr. Kirche der drei ersten Jahrhund.", 1860, s. 39.

<sup>2</sup> Rom. 5:12-21; comp. 1 Cor. 15:21, 22.

pressly confessed in the oldest church of the apostolic age, from various and most competent sides, but that it was even clearly though tacitly *presupposed* as a self-evident truth liable to no reasonable doubt. Assertions like those of Paul deserve the more credit, as they are in general not said with a fixed purpose, but were only occasionally mentioned, without the least demonstrative tendency, and nevertheless showing a conviction which has left no place for doubt at all. One observation more, and I abandon this part of my demonstration. It is well known what was the very oldest heresy concerning the person of our Lord in the Christian Church, a heresy already mentioned in the New Testament itself, and most emphatically opposed by some of the Apostolic Fathers, as the doctrine of the Antichrist.<sup>1</sup> It is the so-called *Docetism*, denying that Jesus Christ really did "come in the flesh." Certainly, it does not lie on our way here to sketch an outline of that heresy in its various forms and apparitions in the Church history. Let this suffice: the early denial of Jesus' really human *body* afterward led to the doubt whether a human *soul*, and, if so, whether a truly human *spirit*, ought to be ascribed to him, even during his dwelling on earth. Now, to be sure, the absurdity of this negation speaks for itself, but the apologetic value of the existence of such a heresy in the first century must not be disregarded. Is it not obvious how utterly exceptional the impression must have been which the person and life of Jesus have made, when those who first tried to form themselves a conception of his personality involuntarily came to this representation: only in appearance he can have been a man; in his godly manifestation he had nothing but the semblance of men? Is not the whole originating of this heresy altogether absurd and inconceivable if modern naturalism is right? Is any other man known, about whom a whole sect believed, already forty or fifty years after his death, that he had not been a man? Was there ever any prophet who already in the eyes of his own contemporaries or of their first followers, has grown out to such immoderate proportions? And if this ought to be denied, as it certainly must, is not in this extraordinary fact a convincing proof of Jesus' immeasurable greatness?

<sup>1</sup> 1 John 4:2, 3; 2 John 7; compare the Epistles of Ignatius.

IV. To all these questions the answer to be given seems as indubitable as the logical result which may, nay must, be drawn from it. And so we have proceeded far enough now to decide whether a solid and firm ground can be discovered on which that general conviction concerning Christ's divine nature was founded, and on which this same faith can safely rest for the future. This ground, indeed, would be easily found, if we could appeal to all the miraculous deeds and fates of our Lord as recorded in the New Testament writings, more especially to his resurrection and exaltation, by which he was powerfully demonstrated as being "the Son of God." But it is well known how the antagonists of the gospel in our days judge about these records ; and though with great reluctance and self-denial, we are determined to hold ourselves now on the stand-point of our opponents, and to offer them fairly a battle on their own ground. We will therefore not even complain of the unlimited wilfulness, unlawfully assuming the name of impartial science, whilst it anatomizes and desiccates the evangelical reports in such a way that the last breath of life vanishes from the martyred corpse under the bloody scalpel, and that of the whole building of historical truth no single stone is left in its place by the merely destructive criticism. On that side Keim's ruling principle seems to make law ; and the historical documents are to be *forced* in procuring a real, that means natural life of Jesus. In other words : the sacred records must be put to the rack to be amputated or dislocated like Procutes of old, in order to suit the wishes of those critics who construct the history according to their own fancy and meaning. All this, however, we will now patiently bear. But, when following the course of our investigations' stream upward in tracing the origin of Christian truth, we come closer and closer to its very head sources, there we find one fact which can never be annihilated, on which we desire to throw the fullest possible light—viz., the indestructible utterance of *Jesus' own self-consciousness*.

The utterance of the self-consciousness of Jesus himself ! Again, how triumphantly decisive this our appeal would be if we were allowed to give here, as it were due, a preponderating voice to the fourth gospel ! But we know a sentence of death of which no appeal is granted, has been passed by modern criti-

cism on the authenticity of the Gospel of John. As for us, we are not a moment in doubt whether the gold of this gospel shall come forth unharmed, yea, even purer and brighter, out of the present ordeal, and we discover of this already now the promising prognostics.<sup>1</sup> Still we wish to be both generous and sober. So we pay now our attention exclusively to the three Synoptical Gospels, even more especially to those sermons (*Logia*) of our Lord, which even the extreme negation regards as containing the undeniably genuine kernel of the Gospel of Matthew. Let us give the Sermon on the Mount, contenting ourselves with its redaction, such as it has been curtailed by the severest critics. What, then, hearing those words, have we to think of this Man, who unhesitatingly puts his own modest disciples, when persecuted for his sake, on the same level with the glorious Prophets of the old Covenant?<sup>2</sup> Who thinks it possible that any one should believe, no trifle, forsooth ! "that he had come to destroy the Law and the Prophets," and peremptorily declares that, on the contrary, he did "not come to destroy, but to fulfil" them?<sup>3</sup> Who does not, like those Prophets of old, say, "So speaks the *Lord*," but claims unconditional faith and obedience for *his* own "I say unto you,"<sup>4</sup> even in opposition to that which had been said of old? Who, in addressing his disciples, when speaking of God, now says, "my," then again, "your" Father, never indiscriminately joins both in one, "our Father,"<sup>5</sup> as he *could* not bring himself on the same level with them, for the innerly impossibility of confessing himself in an equal relation to God; the more striking the deep piety of this Rabbi in Israel and the loving-kindness of this friend of men being unquestionable? Who, however meek and humble, still with the mere expression, "If *ye*, being evil,"<sup>6</sup> evidently places himself beyond and above all his sinful hearers, and though knowing so well, as he shows elsewhere, what manifold evil proceeds from the human heart,<sup>7</sup> has never to utter the least

<sup>1</sup> Compare a. o. the excellent work of C. E. Luthardt, "Der Johann. Ursprung des vierten Evangeliums untersucht" (1874), a book which may well be called an apologetical triumph. See too our own John's Gospel, Apologetical Lectures, translated, with additions, by D. F. Hurst, D.D., Edinb., 1869.

<sup>2</sup> Matt. 5: 10-12.

<sup>3</sup> Matt. 5: 17.

<sup>4</sup> Matt. 5: 22.

<sup>5</sup> Matt. 5: 16; comp. 6: 4, 6, 8; 9: 22.

<sup>6</sup> Matt. 7: 11.

<sup>7</sup> Matt. 15: 19.

confession of weakness or sin before God or men? Who, lastly—not to quote more—thinks it insufficient that any one should “say unto him, Lord, Lord,” but at the same time clearly indicates this name for himself, and claims it as his undeniable right.<sup>1</sup> What have we to think of a man proclaiming himself as the future Judge of the quick and the dead? In truth, whosoever, after reading and pondering such words, can suppose that this Orator of the Mount did not stand much higher than other eminent popular teachers of his or later days, he has never yet understood the very key-note of the Sermon on the Mount, and Ferrar’s word may be severe—it certainly is not unjust—“to compare Rabbinism with Christianity and Hillel with Christ requires either a consummate effrontery or a total paralysis of the critical faculty.”

Do we perhaps contend more than we can prove? Let us then look at another page of the highly-lauded *Logia*. Again we cite no other passages save those whose authenticity has never been questioned by science and whose explication is not doubtful in the least. We confidently ask every sound reason, every honest conscience, how to judge the Man who exalts even the least of his followers above the greatest of prophets, and claims for himself a place far higher than that of Jonas and Solomon, yea, calls himself “greater than that temple,” which was regarded as the seat and throne of God’s own manifested presence?<sup>2</sup> Touching and affecting it certainly is, but is it spoken in the spirit of common humanity, when he, evidently quoting God’s own words and promises, contained in old prophetic utterances, calls himself the source of true rest, and invites all those “that labor and are heavy laden, to come unto him”?<sup>3</sup> Does he speak in a purely human spirit when he says that eternal salvation or perdition depends upon the confession or denial of his name, thus indicating for himself divine worship from his followers?<sup>4</sup> Once again, is it spoken in a human way, when he, who regards the love of God and of the neighbor as the summary of the law, utters with regard to himself that majestic word, “He that loveth father or mother more than

<sup>1</sup> Matt. 7: 21-23.

<sup>2</sup> Matt. 11: 11; 12: 39, 41; 12: 6.

<sup>3</sup> Matt. 11: 28; comp. Jerem. 6: 16; Jes. 45: 22.

<sup>4</sup> Matt. 10: 32, 33.

*Me is not worthy of Me*; and he that loveth son or daughter more than *Me*, is *not worthy of Me*.<sup>1</sup>

There is far more besides. It would not be out of place here to show what unparalleled consciousness of holiness and power speaks in the majesty with which he grants absolution to sinners, peremptorily and unreservedly, in his own name and on his own authority, a fact so utterly exceptional that those who witness it ask, wondering, "Who is this that forgiveth sin?"<sup>2</sup> Indeed, there is sound common-sense in the hatred of his enemies, when, hearing Jesus say such things, they indignantly exclaim, "This man blasphemeth God." Even in the most virtuous man such an arrogance and self-conceit as utters itself in similar words, would be nothing less but madness and blasphemy. The same must be said of not a few expressions of the boldest character in most of those beautiful parables so evidently showing the genuine stamp of Jesus' own personality. There, too, he represents himself without the least hesitation as the "Son of man, who shall enter in his kingdom," whose "field is the world," eminent above all former prophets as the own "Son of God," as the future King and Judge, once "coming with his angels in his glory and sitting on his throne."<sup>3</sup> But it is quite impossible to indicate all that could be alleged, and we have cited already more than enough with regard to the aim we wish to attain. It is true, if any one is irrevocably decided beforehand, never, at any price, to acknowledge the supernatural character in the person of our Lord, and to throw off this belief as an unbearable burden, then, of course, before so stubborn a prejudice the clearest evidence must fail. Certainly it will not be impossible, with a great display of wit and artifice, on some trifling pretext, to undermine and weaken the proper sense and power of this or that expression; against wilful opposition no truth can stand; but if we honestly and earnestly look at all these words, there can be indeed no shadow of doubt. They speak so loudly and absolutely, that we cannot but feel a kind of compassion for those whose hopeless assaults only show their own weakness in breaking against these never-passing words, like the fierce and raging billows bursting in spray and foam

<sup>1</sup> Matt. 10:37.

<sup>2</sup> Matt. 9:2, 3; Luk. 7:49, 50.

<sup>3</sup> Matt. 13:41; 21:37; 22:2; 25:31, and elsewhere.

against the unmovable rock. There is no ground to fear for the solid and massive anvil unhurt by the repeated strokes of the hammer, but there may be reason to complain of the arms wasting their strength in useless efforts. All duly considered, there is indeed no chance of escaping this dilemma : He who has spoken about himself as Jesus has done must either have been a fanatic or an impostor, one of the two, if he were not really the Son of God. The "Son of God," thus he calls himself again in the most solemn moment of his life, when he is conjured by his judges under oath to swear to the truth. Then, his last hour approaching, as the high priest's adjuration in the name of the living God, he utters that majestic, "Thou hast said!"<sup>1</sup> This word alone speaks a world for itself, and we can hardly envy the inventive acuteness of a certain commentator, who gave of that word this miserably lame interpretation, "Thou hast said, not I!" But even if it were possible, by some dexterous knack, to strike this or another weapon out of our hands, what then? Still there would remain that indelible name, "the Son of Man," itself, this name so repeatedly uttered by the Lord's own lips, according to all four Evangelists, and always exclusively used of him. Indeed, this name alone would be sufficient peremptorily to answer our question. We do not ask now with what intention, but for what reason Jesus by preference chose that name, when speaking about himself to the disciples or to the people, a name never taken by any other before ; and this reason *can* only have been this, that, though feeling himself thoroughly man both in an objective and subjective sense, he was nevertheless conscious of being originally and essentially *different* from man ; and infinitely *more*. In the prophetic vision of Daniel, from which obviously the name is derived,<sup>2</sup> one like a "Son of Man appears on the clouds of heaven," which means in symbolic expression, "One originating from heaven, and, therefore, although closely united with humanity, exalted above all mankind by origin and power." And now we need only take notice of the principal things which Jesus in his divine self-consciousness has declared about himself as the Son of Man ; we need merely consider them with a little attention in a general survey, and the most positive and decisive answer shall

<sup>1</sup> Matt. 26 : 63, 64.

<sup>2</sup> Dan. 7 : 13.

be given to the often repeated question, What we have to think of Christ? Indeed, all things concur to lead us to the acknowledgment of the great and holy mystery of the "Word made flesh," a mystery, whose blinding glory makes our eyes dazzle, but to which the Lord himself alludes, when uttering that word as unfathomably deep as it is undeniably authentic, but which would be the grossest blasphemy if he who spoke it did *not* stand above all created universe: "All things are delivered unto me of my Father; and no man knoweth the Son but the Father; neither knoweth any man the Father save the Son, and he to whomsoever the Son will reveal Him."<sup>1</sup>

To the very same result we find ourselves equally brought when proceeding in our argumentation from a quite different side. Not seldom those who refuse to acknowledge the divine nature of the Lord still declare themselves disposed to regard and honor him as the true, ideal man, before whom we must not bend our knees, but respectfully have to incline our heads. "Jesus Christ," such will be ready to proclaim, "may well be called the Son of God in *this* sense that he has been above all others the true and perfect *man*." Is it not evident, however, after a little consideration, that it is quite impossible to keep *this* stand-point, and that the force of an inexorable logic must necessarily push us either a step backward or forward? If Jesus has really spoken about himself these and similar words, whilst still he would have been only a man of the same movements as we, then he can *not* have been *sinless*; then, on the contrary, he was guilty of arrogant self-deceit, not to say of the most presumptuous pride. Besides, a really sinless man would be such a striking exception, on the general rule of mankind, as could never occur save by God's extraordinary and miraculous intercession, for which, no need to say, there is no place left in the system of modern empiricism, and so this must be rejected *à priori*, as utterly out of the question. No wonder, indeed, if the boldest and most honest among the leaders of modernism do not any longer shrink from the natural and inevitable consequences of their own principles. Th. Keim, for instance, who formerly defended the absolute

<sup>1</sup> Matt. 11: 27; Luke 10: 22; compare about those two texts, Olshausen, "Die Echtheit der vier Evang.," s. 295.

sinlessness of the Lord, and has later emulated with Ernest Renan and others in the warmest eulogies on his person and character,<sup>1</sup> now already unhesitatingly concedes that "Jesus was given to sundry Jewish errors and prejudices," "not always free from feverish restlessness," sometimes showing "a certain harshness," on the whole not in any specific way, but only gradually eminent in morality above the common level of his countrymen and contemporaries. Other foremen of modernism, less scrupulous and still more consistent, go even pretty far beyond these assertions. This consistency of course is quite unavoidable to naturalistic principles, their very essence being the faith in fixedly determined causality, but by the same consistency they at last necessarily destroy and annihilate themselves. On the contrary, Christian conscience, enlightened by Scriptures, history, and experience, most decidedly affirms that all moral defectiveness comes from ourselves, but that all which is pure and holy in the moral and spiritual sphere of life originates from and is exclusively owed to Him, who "did always what was acceptable unto the Father," and above whom nobody of sound sense shall ever dare to place himself. But if we are once compelled, on the united testimony of Scripture and experience, to attribute to Christ the glory of absolute sinlessness and holiness, then we cannot remain where we are, and we feel ourselves urged ere long to move a step forward. If Jesus really has said about himself the words we have listened to, then the Son of Man *must* have been more than an eminent and sinless man, standing higher than any other on the scale of morality; then he can have been no other but the *own and only begotten Son of God, and ever as such the true ideal Man*. Let us take hold now only of this position, without seeking for it at once an accurate scientific definition. In our days the main alternative is not Arian or Athanasian. These are not now the opposite contending poles of the arc round about which turns the actual theology. The burning question of the day on the roll nowadays, is: truly supernatural or merely naturalistic? It is a question not before all of a philosophic, dogmatic, exegetic, or critical character; it is above all purely historical: Jesus merely man, and then of course sinner, or more than man; from below, like all, or from

<sup>1</sup> See f. i. "Geschichte Jesu von Nazara," iii. s. 688 ff.

above in a quite particular sense? The nature of the relation between the divine and human in the Lord cannot be treated here; we have now to do only with the fact; the Son of Man nothing less but the Son of the living God, in the metaphysical sense of the word. He who contests this simple fact is obliged to break down the compact phalanx of arguments we have been mustering; he, on the contrary, who accepts it, is bound to accept it with all its lawful consequences. If, indeed, it is once ascertained that Jesus really *is* what he has testified about himself, then the wonderful and supernatural in his life, whatever it may be, can offend or surprise us as little as the glory of the rays beaming from the source of light. That which is wonderful to us in our condition is nothing but natural to him; and, all duly considered, there remains only one central wonder: it is unparalleled personality itself. That this wonderful image of Christ depicted in the gospels should have been invented by men so very far inferior to the ideal they shaped, is psychologically absurd and altogether unimaginable. He who degrades the Lord—for so in fact we ought to call it—who degrades him into being a once crucified Jew, living now merely in the grateful recollection of mankind and in probable immortality, like any other deceased martyr—he debases not merely Christ's whole manifestation, but the whole history of the Christian church in its birth and growth to an obvious absurdity. To such an absurdity I, for my part, prefer a mystery, which, as mystery, even when revealed, can never be fully explained. I prefer this, I say, not only in the name and for the sake of faith, but quite as much in the name and for the sake of sound, reasonable common sense, and of true and trustworthy science.

V. Perhaps these last words may seem to some too bold, and we ourselves “unwise in our glorifying.” Still we cannot possibly retract one jot or tittle from what we have said, for all the certificates we have been testing and investigating we have seen stamped with the same seal of a character as unequivocal as irrefragable. Let us now, lastly, listen to the testimony given by *spiritual experience*, both that of the *individual* Christian's life and that of the whole Christian Church *collectively*.

It may be called the strength as well as the weakness, but at

any rate the glory, of our century, that men will not any longer believe on authority, even on that which is best founded, when they cannot see with their own eyes, making out on *empirical* grounds what they can accept as reality and truth. Now, on the whole, it may be said, men in this respect generally are not going too far ; on the contrary, most of them are not going far enough. With all their empirical tendency, people very often are not sufficiently empirical yet. When speaking of empiricism, which means experience, they used to think quite exclusively of the lower natural sphere of tangible and visible things, of mere common every-day life, with its occurrences and sensations, and hardly of the far more interesting and valuable experience in a higher, spiritual sphere. Has not, for instance, the Christ of our Gospel a witness for his greatness and glory in the testimony of bygone ages, in the voice of so many millions from all nations and tongues uniting in the same confession, " Of his fulness have all we received, grace for grace" ? (John 1 : 16). If eighteen centuries ago the Jew would still, with some appearance of right, doubt whether Jesus really was the promised Messiah, this last semblance of right vanishes evermore for the sceptic of later ages. By far more than words, by deeds and facts has the Christ of the Gospel, the King of ages, answered and loosed all doubts, and he still continues to do so. It was a very remarkable reply which, according to an old church historian, a humble Christian once gave to the Roman Emperor Julian the Apostate. When the latter sneeringly asked, " What the carpenter's son may be working just now ?" the other answered, " Preparing the wood for the pile of the emperor's funeral," and the mysterious word seemed a kind of prophetic oracle, for the apostate died soon afterward. And cannot this word be said to have another typical and symbolical meaning ? can it not in a certain sense be called an epitome of the history of Christ's kingly reign ? Is he not ever and again preparing the wood for the funeral-pile of higher and lower antagonists, and every new Sapphira,<sup>1</sup> may she not hear again the word reminding the fulfilled sentence of some former Ananias, " Behold the feet of those which have buried him are at the door, and shall carry

<sup>1</sup> Acts 5 : 9.

thee out."<sup>1</sup> "Man of Galilee, thou hast vanquished!" Many reluctant lips could make since Julian's days the same unwilling avowal, and, in return, how often in the course of ages has the mighty hand of this Son of Man built a funeral-pile for his most powerful opponents, who thought themselves already sure of victory? How much new life in every domain has he roused from death by a victorious power, only equalled by the tender care with which he has protected and fostered this new life through all ages until this day! Having left the earth in bodily appearance, Christ came spiritually again in the world, ever the same as before. Again, "He went about doing good, and healing" all that were oppressed by the evil spirits of passion and sin and came to him for relief. He has buried an old decaying world, and on its grave caused a new one to rise such as mankind had never witnessed, a world ruled by moral and religious principles and affections, never proclaimed by the most eminent philosophers. With the same kindheartedness as before, he again has laid his blessing hand on the heads of millions of little children, and has opened the eyes of thousands of young men for the realized ideal of the noblest truth, of the purest and holiest beauty. To marriage he has given a consecration never had of old, assigning to woman a place such as in Rome, Athens, or Jerusalem never yet was thought of. As the Good Shepherd, he has brought sheep to his flock, who seemed hopelessly to have gone astray in the wilderness; and as the Good Samaritan, he poured his wine and oil in wounds such as only a sinful earth can afflict and only heavenly love can balm and heal. He touched the chains of the degraded negro-slave, and they fell from the wearied arms; he has made "Bethanys" and "Bethels" to rise, where before "Beth-avens" (houses of vanity) were seen, and wherever the blessed rustling of his approaching footstep was heard, according to the prophetic word, the wilderness itself began to flower like a garden of roses. His spirit inspired art, and its wings were spread to ascend to the loftiest and purest sphere. His word fecunded science, and before the philosopher's wondering eye a new world originated of thought and knowledge which former gen-

<sup>1</sup> Acts 5:8.

erations never realized. Not to say more: it is to him and his gospel mankind owes its highest aim, society its culture, the State its safety, the Church its reformation, poverty its consolation, weakness its support, the whole life, yea death itself, its peace and its charm. Wherever he came, all things improved; and, on the contrary, as often as, by word or deed, he was "besought to depart,"<sup>1</sup> the evil increased. Whilst all other religions, even those of later date, show the unmistakable signs of decay on their fading and withered faces, his "evangelium æternum" shines with bright glory in eternal youth and beauty, and whilst victoriously resisting every evil tendency in the reigning spirit of the age, it fulfils all the real wants of every new generation, and in the midst of a restless society pressing hurriedly forward, it remains always ahead of every progress. Indeed, the richness of the subject is overwhelming, and we cannot consider all. One thing, however, ought not to be overlooked: He who has perpetrated all these works and continues still to do so, is not Jesus, the "gentle and virtuous Rabbi of Nazareth;" it is "God's Son made flesh," the Christ of Bethlehem. Of his ghostly and shadowy caricature, the Jesus of naturalism, it is certainly *not* known that he ever should have regenerated the moral world or done any of these things by which the glorious name of the Son of Man makes the heart's pulse of thousands beat faster and stronger, and awakens the thrill of a sympathetic echo in their inmost soul. Of this imaginary "Rabbi Ben-Joseph" nothing indeed is with certainty known, save the genealogy of the phenomenon originated in the misty period of Ebionitism, nearly connected with Arianism and the heresies of Servetus and Socinus, of Humanists and Deists, of older and later Rationalists, this bastard result of pseudo-Christology stands even in close relation to modern Judaism. This genealogy tells for itself. That this "spiritist manifestation" is nothing else but a spectral apparition, is evident. This Jesus, a man like others, and who *nevertheless* should have effectuated things utterly superhuman, is an idea contradicting itself. Can this Jesus, innocently crucified, but raised from the dead merely in the wild imagination of his first dis-

<sup>1</sup> Matt. 8:34.

ciples, have been able to build a church out of the different, nay opposing, elements of heathen and Jews? He would not even have been able to found a school outliving the end of the first century! Not *he*, to be sure, could gather, preserve, extend, and reform the Church, leading it from triumph to triumph; on the contrary, whenever *his* voice was listened to, the effect was the undermining and dilapidating of the Church, so as to render it contemptible in the eyes of its foes. Where can they be found, the sinners converted, the mourners comforted by this Jesus? Where can be shown the triumphs which he has obtained? Where has the missionary been working which he has excited? Where lays the mission field which this make-believe Jesus ever conquered? His past is clouded, his present day powerless, his future without prospect, and where this pseudo-Christ still unlawfully strives to occupy a place in the confessing Church, this Church is obliged to repel him with the words, "Christ I know, and God's Son I adore; but ye, who are ye?"<sup>1</sup> and it vainly waits for an answer until this day. Verily, if the spiritual experience of the whole Christian Church has a claim to be heard as a witness, then indeed our faith may be fully satisfied with the splendid testimony and homage it renders with the concordant voice of all ages to the Christ of the Gospel.

And yet till now we have limited ourselves to spiritual experience, as felt *collectively* by the Church at large; we have not even appealed to the *personal* experience of each individual Christian. This is the very centre of the position. In this stronghold we stand inexpugnable as long as we keep to that ground. Other testimonies do not, to be sure, become superfluous; but they get their real value and strength only by their connection with that of which our own inner personal experience has to attest. Of course I do not mean to say that no vestige of spiritual life may be combined even with an appreciation of the personality of the Lord undervaluing his real greatness. Such, indeed, is the "unsearchable riches of Christ," that nobody can ever come with him, even in the most superficial contact, without being enriched in some way or other. A single beam

<sup>1</sup> Acts 19:15.

at least of his glorious light, a few drops from the overflowing cup of grace, a spark from the fire of the Holy Ghost may be got and enjoyed where the “fulness of God” is not acknowledged and honored in him. There are certainly honest, earnest religious doubters, by principle opposite to supernaturalism, and still, we are sorry to confess, in many respects putting to shame more than one zealous champion of the soundest Christian orthodoxy. This, however, does not in the least annihilate the truth that the inmost wants of the sinful human heart cannot fully be supplied unless another and better Jesus be known than the one who is left to us by modern criticism. The really Christian experience finds its full expression in nothing less but the word, “We know that this indeed is the Christ, *the Saviour of the world.*” Here truly lies the deepest ground of the comforting and sanctifying power of the Gospel, the centre of gravity of Christ’s whole manifestation, but here, too, the reason why no representation of Christ merely as teacher or example or founder of a new religion, however sublime, can possibly be “a power of God unto salvation” for poor sinners. No performer of astonishing miracles, no second legislator like Moses, no founder of another and better religion, our sadly degenerated mankind wanted ; it wanted most of all a Saviour bringing new life to a world severed from its God, and bringing this through reconciliation. Not this is the gospel, “Elevate thyself in order to reach as nearly as possible the moral ideal put before thy eyes in the pious Jesus.” Such a preaching were quite as suitable to sinners as the exhortation would be to the lame, “Try to set every day two steps more ; then, by and by, you will wholly recover.” No ; the really glad and blessed tidings which “never entered into the heart of man” by itself, are these : “A holy God mercifully steps down in his only begotten Son so deep and low unto poor sinners, that out of a free grace he manifests his good pleasure to save thee, and, however unimaginable it seems, has loved thee from the beginning.”<sup>1</sup> Once more : not this is the gospel of Christ’s kingdom, “Love God above all, and thy neighbor like thyself ;” it is nothing but the summary of the law which already Moses proclaimed.

<sup>1</sup> 1 John 4 : 19.

and the law, when shining forth in its full brightness before us in the person and work of the Lord, instead of bringing life and peace, can only lead unto despair, if at least we take its real sense earnestly at heart. The true gospel is this: "God was in Christ reconciling the world unto himself."<sup>1</sup> Not merely as a preacher and teacher of these glad tidings—not as the founder of a new religion, somewhat more or less above a Brahma or Buddha, Christ manifests himself to us; but as the "only Mediator of God and men," as the "unspeakable gift of the Father," as the Saviour of all those "who through him go unto God."

This and no other really is *the* true, historical Christ, proclaimed not by some single texts more or less defensible against the assaults of criticism, but by Holy Scripture as an organic whole, from the beginning till the end. This is the Christ whom the true Church of all ages not only confesses, but adores, according to the oldest definitions of the faithful as "those who, in every place, *call upon* the name of Jesus Christ."<sup>2</sup> So it was in the first century; so it is still; and the living Church of our day will be ready to say, "This is the Christ I acknowledge; I know no other besides him, and with him alone am I safe." This, again, is the Christ who, how often disregarded or repulsed, presents himself ever and anon to every age, every generation, every heart, the "Christ whom God has made unto us wisdom, and righteousness, and sanctification, and redemption"—but *redemption* first of all and above all. He who once knows him can never confound him with any other. And for those who do not yet know him as such, the first question is not whether he can be fully explained or conceived, but if there are sufficient grounds to believe in him, and, above all, if the soul can do without him. This certainly is impossible as soon as the true sense of *sin* has come to man's consciousness. Alas! it is even this feeling which is so often sadly wanting. To a great many in our days, Anselmus' old saying could be applied, "Tu non satis cogitasti, quanti ponderis sit peccatum" (you have not yet sufficiently realized the preponderating weight of sin).

<sup>1</sup> 2 Cor. 5:18.

<sup>2</sup> 1 Cor. 1:2; comp. Rom. 10:13; Acts 9:14.

So it is not in vain we have been seeking for an answer to the vital question, "What think ye of Christ? Whose Son is he?" We have done so, referring *conclusively to sources the authority of which can be denied by nobody*. Profane literature, Christian antiquity, testimonies of the apostolic age and of the Lord's own self-consciousness; lastly, the voice of spiritual experience of the whole Church and of each individual Christian—all these separately, as well as combined, have led us to an identic result. So, then, we may call it as clear as sunlight what place must be assigned to this Son of Man in every, and especially in the highest, sphere. With a few words on this last point, we conclude.

For him, the Christ of our Gospel—after all that has been argued, it seems to speak for itself, and can hardly astonish any one—we claim the first and foremost place in *the annals of the world's history*, on the *domain of philosophy and religion*, on the *field of theological doctrine*, in the *sphere of individual and social life*.

For him we vindicate, first of all, a prominent, central place in the *history of the world and of mankind*. Many in our day used to speak with a philosophic term of a different view or "contemplation of the world" (*Wereldbeschouwing*). But when we contemplate this world from the right angle and in true light, there is only one view admissible, surpassing that of any philosophical system in depth, beauty, and harmony of conception; it is that which makes the Son of Man the centre and axis of the world, and finds its expression in the words, "He is before all things, and by him all things consist—σὺνεστηνεν properly have their *consistency* (σύστημα) through him alone—that in all things he might have the pre-eminence."<sup>1</sup> Christ is not only the crown and the glory, he is the core, the heart, the pulse, and the highest ideal of mankind, in whom its essence and destination is shown, unto whom the whole history of humanity tends, without whom its annals remain a book-roll closed with seven seals. He, the God-man, crowns the past, rules the present, conquers the future. But of naturalism: it is the inevitable doom of naturalism to make historiography itself an utter

<sup>1</sup> Col. 1:17, 18; comp. Eph. 1:10.

failure. Its spectral Jesus of Nazareth stands beyond the precincts of reality ; our Christ of Bethlehem is the Prince of history and the King of the ages.

For him, again, we ask the first place on the domain of *philosophy and religion*. Atheism or pantheism, these are—according to the nature of the case and the experience of all times—the two opposite poles between which the pendulum of human thought ever vacillates ; they are the Scylla and the Charybdis for our philosophy, often shipwrecked by one when it has escaped the other. No guide leads us safely between both, through the narrow channel of truth, save the Light of the World and the compass of God's Word. But this Sun of the highest truth does not rise before our eyes, as long as the fountain of the highest life has not been opened in our hearts, and this life can only originate from him. Christianity is not merely a religion surpassing all others ; it is the only true religion for mankind and men, because it alone manifests the *special*, the *accomplished revelation* of God's grace and our salvation. To the Christ of this revelation does not belong a place, as once was given to his statue in the Lararium of the Emperor Alexander Severus in Rome, amongst, or even above, the most renowned heroes of religious life. No ; the truth is, as has been well written on the obelisk of the Saint Peter's place in the same metropolis : “ Christus vincit ; Christus regnat ; Christus suum populum ab omni malo defendit ” (Christ triumphs ; Christ reigns ; Christ defends his people against all evil).

For this Christ we claim the first and central place on the *field of theology, more especially of doctrinal and moral truth*. If we are, indeed, to hold Christ for a mere natural product of sinful humanity, then Christian theology (the doctrine of *God*) has lost the very ground and reason for its existence. The former queen of sciences, by the grace of God, loses the crown together with the king, and in the best possible case becomes a science of *religion* by the grace of men, clad in a philologic, historical or philosophic robe, which would better suit other sciences, because when theology itself has not any *proper, independent* principle of its own to signalize or maintain, it cannot own any of those scientific departments of whose sphere it ought to be the

centre. On the contrary, from our stand-point, theology is and remains an independent, self-relying science, as the science of the faith in Him, who, as being the true Life, makes the true Light radiate from the centre he occupies into all directions. Doctrinal and moral truth, no longer are they now separated, still less divided by a wide gap. They are one and indivisible now by the same Christocentric character. Christ himself is the fountain and the focus of both.

Lastly, for him we require, with an undeniable claim, the first and central place in *every sphere of individual and social life*. It may be possible to know God in some measure by nature, but we can possess him only by Christ. Christ, and he alone, the King for heart and soul, in the family and the society, in arts and science, in the free Church and in the free State! Who could name all where Christ has a right to reign, or, rather, who would be able to indicate any region of human life where this Son of Man should *not* be the Alpha and the Omega? We have only just named the titles of some chapters in the great Book which God is evidently writing before our eyes, partly perhaps through our hands. Certainly, this Book is far from being achieved, but still it can be already stated now what its motto, or, if we like better, what its final conclusion, will be—that word of Daniel: “To the Son of Man was given dominion, and glory, and the kingdom; his dominion is an everlasting dominion which shall not pass away, and his kingdom shall not be destroyed.”<sup>1</sup>

The dominion and glory of this Son of Man—how often has it been disavowed, how fiercely contested! When shall it be more generally acknowledged again? when at last universally believed and honored? We hinted already at Christ’s certain and final triumph; with regard to the importance of the subject we add one word more. We began our essay with an anecdote from the history of unbelief; we wish to conclude it now by an illustration taken from the history of faith. About the middle of the sixteenth century, in the cathedral of a small town in Germany (Frauenburg), a grave was opened for an eminent and renowned Frauenburg scholar on whom science,

<sup>1</sup> Dan. 7: 13, 14.

even in our days, looks still with unfeigned admiration. Copernicus, the famous astronomer, was respectfully brought to his grave. He deserved that respect not for his science alone. His eye had searched the mysteries of the visible heaven, but it had been opened too for other depths and another light than those of the firmament and its stars, and his own hand had written down before it was stiffened by death the epitaph which is still seen on his tomb in those Latin verses :

“ None parem Pauli gratiam requiro,  
Veniam Petri neque posco, sed quam  
In crucis ligno dederas Latroni  
Sedulus oro,”

which I hazard to render in these lines :

“ No crown as for a holy Paul once glowed,  
No grace like that on Peter was bestowed,  
But what the thief from Jesus’ cross was vowed,  
That I beseech.”

Oh ! all of you, Christians of the old faith and of modern views, learn from this Prince of modern Astronomy to know, feel, and show true humility of heart. Then verily I say unto you, ere long for your faith, too, Christ shall conquer his right place, and, after having asked doubtfully first, “ Who is this Son of Man ? ” you will once utter with heartfelt conviction the triumphal shout, “ I *see* the heavens opened and the Son of Man standing on the right hand of God ! ”

J. J. VAN OOSTERZEE.

## RECENT CHANGES IN JURISPRUDENCE AND APOLOGETICS.

THE influence of jurisprudence on the doctrinal side of Christianity has been frequently recognized. The term "Imputation," for instance, was taken by St. Paul, himself a Roman citizen, from the Roman law; and the theory of imputation, as elaborated by St. Augustine, who was bred a jurist, may be found, almost as he states it, in the classical text of Roman jurisprudence. The suretyship feature in our theology, as exhibited by Tertullian, who was also educated as a jurist, and who for some time practised law at Rome, is built on the Roman system of sponsorship. The legal analogies which were used to illustrate the atonement, came, after a while, to be regarded as part of the doctrine as taught in the sacred text. Less familiar, however, is the influence of jurisprudence on apologetics; but though less familiar, this influence has been by no means less potent. It is by jurisprudence that the popular idea of proof is furnished. What jurisprudence declares to be the true mode of proof, the community is apt to accept as such; what jurisprudence declares to be an incompetent instrument of proof, the community is apt to regard as incompetent. Aside from this, the evidential side of jurisprudence adapts itself, though somewhat slowly, to the settled logic of the times; and what jurisprudence, after due reflection, says on this topic, we may regard as the practical utterance of logic. Hence it has been that Christian apologists have at all times been disposed, if not to adapt juridical tests, at least to appeal to juridical evidential standards. It so happens, however, that the evidential principles of jurisprudence have in the last few years

materially changed. The effect of these changes on Christian apologetics I now propose to consider.

I. The first change to which I call attention is that which abolishes the old tests of competency, and opens the witness-box to all persons, no matter how much interested, who may have knowledge pertinent to the issue. By the old system, not only parties, but all persons having the slightest pecuniary interest in a case, were excluded. Now these restrictions are removed. The change is acknowledged on all sides to be beneficial. It abolishes an arbitrary test, which, while it let in, and invested therefore with an artificial grade of credibility, witnesses under every kind of bias which was not pecuniary, silenced witnesses often of the highest integrity, from whom alone, in many cases, primary knowledge of the facts could be obtained. We have established, to view the question in another light, the principle that it is from the parties to a transaction that its character can be best elicited.

How, then, does this great change affect Christian apologetics? Perhaps not very materially; yet at the same time it is impossible that so deep a conviction as that on which the old rule rested, could be unsettled without affecting other departments beside that to which it particularly belongs. Certainly by the earlier English apologists, who wrote with this principle of exclusion before their eyes, we find that the testimony of Christ as to himself is put in the background, while undue prominence is given to the testimony of others, comparatively uninstructed as to the true nature of the system of which they spoke. Now, however, since the shackles of this limitation are loosened, we are led to turn more relyantly to the testimony of Christ as to himself. He is indeed the one party plaintiff to the suit, of all others the most important, contesting the dominion of the world as against secularism and false ecclesiasticism. But beyond this, he is the only primary witness as to his own spiritual mission. Let us, then, inquire what, according to the tests now invoked as to the logical weight of testimony, he has to command our belief.

The first condition of credibility in a witness is disinterestedness. So far as concerns Jesus, we find this condition satisfied to an eminent degree. He gives up his life to those and for

those whom he came to teach. He refuses honor and station ; and though it might be said that this is a wise choice in view of the attendant risks, yet we must remember that possessing, as he does, viewing the case in its lowest sense, marvellous powers of healing, he uses these powers without reward among the friendless and the poor. In others possessing in a far less degree these gifts, we find associated love of money, of dignity, and of display. Not so is it with Jesus. He labors not for himself. He heals not for himself. At last, knowing beforehand that this would be a consequence of his teaching, he dies not for himself. Were disinterestedness the sole condition of credibility, the testimony of Jesus would have the highest logical claim to our belief.

But there is another condition of credibility, and that is conscientiousness. Here, again, we have the same lofty standard. Not a word or an act can be imputed to him as sin. He is the only saint known to us who never repents, because he is the only saint known to us who never sins. With him there is the highest standard of rectitude united with the subtlest analysis of sinfulness. It has been said that a fanatic will lie to effect a good end. But Jesus is no fanatic ; and nothing shows this better than the fact that what we call ends are to him means, and what we call means are to him ends. "He that saveth his life shall lose it." Saving, by a lie, is losing ; for the lie is not only in itself hideous, and cowardly, and vile, but it is the end, it is ruin, it is the lake of flame.

One more test remains—that of breadth and clearness of vision ; and where do we find these qualities existing as they do in Jesus ? He authoritatively reveals a series of truths which, as soon as they are told, fit into our consciousness, but which before him floated about disconnectedly, no one having systematized them either in the height of visionary speculation above, or in the mirror of the human heart below. He discloses the worth of the soul ; the existence of sin in the motive ; the responsibility for light ; the unity and fatherhood of God ; sin's expiation by the cross. Nowhere do we find so harmonious a combination of majesty of thought, of authoritativeness of stand-point, and of accuracy of observation. He speaks as one knowing all things ; he is surprised at nothing ; he is in-

structed in nothing, yet in every thing he instructs. He is limited by no condition, but is in advance of all. He unites in one orb the half truths of the two great philosophies, speaking as one with whom is the sphere of truth entire. No stoic, as has been well observed, approaches him in clear perception and severe denunciation of wrong ; yet the gentlest of epicureans could not excel him in the tranquil delicacy with which he recognizes the play of nature—the darting swallow, the glowing lily, the wheat gilding the lake-side, the young children whom a severer teaching would keep back from his arms. Solitary as to himself, he is universal as to mankind. He is the scintillator of all epochs, but the scintillation of none. No national type of civilization pervades him ; but he pervades all nationalities as soon as they assume a civilized type. In political philosophy he consecrates the family as the corner-stone of the state ; and the state, foreshadowing in this the conclusion to which the best political economy is now leading us, he treats, not as a power which is to create public righteousness, but as an institution public righteousness is to create. As a social reformer he teaches a communism which is at once the goal of progress and the buttress of stability ; he is always ahead of us in our reforms, yet always cheering in our submissions ; and he revolutionizes without convulsions because he moves onward with us the plane on which we stand. There is nothing of which he speaks as to which his knowledge is not complete, for there is no local refraction of atmosphere to affect his vision, and no limitedness either of perception or comprehension to make that vision imperfect. We have, therefore, in Jesus, a witness whom we can impeach neither for want of disinterestedness, nor for unconscientiousness, nor for imperfection of knowledge. He testifies as to facts before his eyes ; as to facts with which he is thoroughly familiar ; as to facts to which he alone is competent to speak. Surely, in view of the weight we now attach to the testimony of parties, when of unblemished character, as to facts which they alone are competent to explain, we have a solution of the difficulties which the concurrent changes of scientific opinion have wrought as to miracles. No mere spectator can prove a miracle, it is said, for the essence of a miracle resides

in its unseen motive power, not in its visible operation. But here he who speaks is the motive power himself.

II. The second great recent change in the law of evidence is that consequent on the abolition of special pleading. By the old law, pleadings, as they were called, were exclusively in writing. The plaintiff stated in writing his claim, to which the defendant pleaded a written defence. To this the plaintiff, if there was matter he desired to confess and avoid, rejoined ; and then the defendant had the right, if he desired to introduce new matter of confession and avoidance, of rebuttal. The process, if at each stage there were grounds for confession and avoidance, went on until at last there came an issue of fact as to which the parties took opposite sides, and this issue of fact a jury was summoned to try. Of this artificial and cumbrous system, it is sufficient now to state one leading deformity—viz., that pleas, replications, and rejoinders must culminate ultimately in a single issue. The whole object of the process was to winnow the case from every thing but the single issue which was thus to be reached. It is true that this was both illogical and unjust. It was illogical, because it is now conceded, as will presently be seen, that all evidence is circumstantial, and that proof increases in weight in proportion to the cumulation of probabilities. It was unjust, because it pared away a party's case to the single issue finally presented by the pleadings, and that issue might have been erroneously taken, or, when presented, might be stripped of its proper logical supports. But illogical and unjust as the system was, it pervaded English jurisprudence, and so far affected popular thought as to lead to the reduction of proofs, on all contested questions, to single isolated issues. We have had this singularly illustrated in Christian apologetics. At one time Christianity has been staked on the catastrophe theory of miracles ; at another, on verbal inspiration ; at another, on the theory of the eternal agony of the lost. Even where this has not been done by the advocates of Christianity, it has been done by its opponents. Following the example of the old pleaders, they would take some collateral incident of Christianity, or some incident that was merely inferential, and interpose a denial, and then, if issue was joined on this, would

treat the contest as if narrowed to this single point. Now, however, since English jurisprudence, the embodiment of dominant common sense as well as the precipitate of dominant philosophy, has abandoned special pleading, and now that the rule is that each party, under the general issue, is to bring forward all his relevant proofs—now that jurisprudence has accepted the logical position that all evidence is circumstantial, and that proof rises in probability in proportion to the cumulation of incidents—the advocates of Christianity can no longer be expected to stake their cause upon single ingredients in a body of cumulative proof, or on supposed logical inferences from that proof, which inferences may or may not be true. If it be answered that the proof of Christianity is cumulative, the answer is that cumulativeness is now conceded to be an essential element of proof, and that that should not be considered strange in Christian apologetics which is thus established by jurisprudence. And by this process we come into harmony with a fundamental principle of logic, that the truth of a conclusion is to be “regarded as a compound event, depending upon the premises happening to be true;” that to obtain the probability of the conclusion we must multiply together “the fractions expressing the probabilities of the premises,” and that every new argument or proof of a fact adds to its probability, so that a fact that is highly improbable on a single proof is highly probable on a cumulation of such proofs, and increases in probability as each new proof is added.<sup>1</sup>

That a probable conclusion (and we will presently see that there can be no demonstration of facts, and that the highest proof of facts is only a strong probability) is reached by a cumulation of proofs no one of which by itself is sufficient to carry the case, may be illustrated as follows by the Tichborne case :

It is 1 to 5 that a person ignorant of French is not Roger Tichborne ;

It is 1 to 5 that a person who, on examination, turns out to be ignorant of some of the important events in Roger Tichborne’s life is not Roger Tichborne ;

It is 1 to 5 that certain tattoo marks on Roger Tichborne, but not on the claimant, could not have been obliterated;

<sup>1</sup> See Jevons’ *Principles of Science*, I. 239.

It is 1 to 5 that Roger Tichborne's foot, as proved by the last of his shoemaker, could not have changed its shape so as to bring it to the size of the feet of the claimant ; It is 1 to 5 that a person of Roger Tichborne's tastes and possessions would not have taken to the trade of a butcher in Australia ; It is 1 to 5 that Roger Tichborne would not for years have concealed himself from his friends.

Now, though on no single one of these specifications is the proof strong enough to decide the case, yet, putting them all together, they make it so probable that the claimant is not Roger Tichborne, that even on an indictment for simulation no other verdict than one of conviction would be reasonable.

III. The remaining change in jurisprudence to which I call attention is the surrender of the old distinction between direct and circumstantial evidence, and the establishment of the position that there is no evidence that is not dependent upon circumstances for credit, and which is not therefore more or less circumstantial. This change involves the recognition of the truth that facts are not the subjects of demonstration, but are to be believed by us on proof of greater or less probability never reaching certainty. Demonstration, it is hardly necessary to say, is distinguished from proof in this, that of a demonstrated conclusion the contradictory is inconceivable and impossible, while of a proved conclusion the contradictory is always conceivable and possible. Of the proposition before us, I take, as one of the simplest illustrations that A testifies to us that a certain person is B. This, in other words, is a question of identity ; and to put it in its strongest light, we will suppose that the witness is a mother, testifying to the identity of her son with a particular claimant. Such was the testimony of Lady Tichborne ; she, in the most solemn manner, recognizing as her son the claimant, Arthur Orton, who was determined to be an impostor by two successive trials. Her testimony, in the face of the many circumstances tending to prove imposture, was impaired by proof of her strong and passionate determination to find in somebody her lost child, and of the artfulness with which the claimant availed himself of this prejudice. Even,

therefore, taking evidence in its strongest and most primary phase, that of evidence to identity, it depends upon circumstances for credit — upon the impartiality, the accuracy, and the percipient powers of the witness.

Paley's argument, based on the testimony of the evangelists, may be taken as another illustration. That argument would be entitled to little weight if it were put as follows :

Whoever testifies to a miracle is to be believed.

A, B, and C testify to a miracle : A, B, and C are to be believed.

The argument is worthless because the major premise is absurdly untrue. But as soon as we put in the circumstances mentioned by Paley, the absurdity disappears. Paley's major premise is substantially as follows :

When a collection of men, distinguished for apparent simplicity and straightforwardness, testify, not in a party, but independently and persistently through long lives, to alleged facts, their publication of which they know will expose them to obloquy and martyrdom, and when their lives are in accordance with their belief in those facts, and their publications bear all the marks of genuineness, then these men are to be believed.

Here credit is dependent upon a series of circumstances, when without such circumstances credit would not be given.

Or let us turn, to take another illustration of what is spoken of as direct testimony, to the statement of C that he saw A kill B. Direct as this statement may be, it has in it four distinct elements of incertitude, each of which requires for its elucidation the proof of circumstances. (1) C, the witness, may be misled, either by prejudice or by defect in his perceptive powers ; or his narrative powers may be imperfect. (2) A's identity, as identity is only an inference from circumstances, is open to doubt. (3) "Killing" is only an inference more or less strong. How do we know that a wound that we saw inflicted, killed ? Aside from the question of the effect of the wound, have not cases been known in which death from fright preceded a blow which would otherwise have been fatal, or in which of two wounds aimed by different parties it was difficult to tell which took effect ? (4) And then as to B, comes the question of identity. Have we not abundance of reported cases to show

that identification of the dead is always disputable? Here, then, as to this simple proposition we have four factors, each open to doubt—1st, the credibility of the witness; and the non-demonstrability of, first, the subject, second, the predicate, and, third, the copula.<sup>1</sup>

To causation these remarks are eminently applicable. "Philosophers, no doubt, hold that *de nihilo nihil fit*—that is to say, their senses give them no means of imagining to the mind how creation can take place. But we are on the horns of a trilemma; we must either deny that any thing exists, or we must allow that it was created out of nothing at some determinate date, or that it existed from past eternity. The first alternative is absurd; the other two seem to me equally conceivable."<sup>2</sup>

<sup>1</sup> "I conceive that it is impossible even to expound the principles and motives of induction as applied to natural phenomena in a sound manner, without resting them upon the theory of probability. Perfect knowledge alone can give certainty, and, in nature, perfect knowledge would be infinite knowledge, which is clearly beyond our capacities. We have therefore to content ourselves with partial knowledge—knowledge mingled with ignorance, producing doubt."—Jevons' "Principles of Science," i. p. 224.

"We can never recur too often to the truth that our knowledge of the laws and future events of the external world is only probable. The mind itself is quite capable of possessing certain knowledge, and it is well to discriminate carefully between what we *can* and what we can not know. In the first place, whatever feeling is actually present to the mind is certainly known to that mind. If I see blue sky, I may be quite sure that I do experience the sensation of blueness. Whatever I do feel, I do feel beyond all doubt. . . . In the second place, we may have certainty of inference; the first axiom of Euclid, the fundamental laws of thought, and the rule of substitution, are certainly true; and if my senses could inform me that A was indistinguishable in color from B, and B from C, then I should be equally certain that A was indistinguishable from C. In short, whatever truth there is in the premises, I can certainly embody in their direct logical result. But, practically, the certainty generally assumes a hypothetical character. I never can be quite sure that two colors are exactly alike, that two magnitudes are exactly equal, or that two bodies, whatsoever, are identical even in their apparent relations. Almost all our judgments involve quantitative relations, and we can never attain exactness and certainty where continuous quantity enters. . . . Inferences which we draw concerning natural objects are never certain except in a hypothetical point of view. . . . Even the best established laws of physical science do not exclude false inference."—*Ibid.*, p. 271 *et seq.*

"Like remarks may be made concerning all other inductive inferences."—*Ibid.*, p. 274.

<sup>2</sup> Jevons' Principles of Science, II. 466.

We cannot, therefore, condemn theology because it does not demonstrate causation, any more than we can condemn physical science for the same reason. And when moral agency comes in, demonstration of the relation between cause and effect is subject to additional difficulties. Of all moral or political sciences, no one has higher claims to be mathematical than political economy, for it deals with things capable of measurement, such as the number and wealth of consumers and the quantity of staples. Yet in no science have the predictions of the most accurate and elaborate of calculators been more fully falsified. A high tariff on English goods has been followed by our sending goods to England to undersell the goods on which we laid the tariff. The silver bill has brought down the price of gold.

Another important observation is to be made. While the unreal is capable of demonstration, proof is the only mode by which we can become assured of the existence of the real. In proportion as we pass from the unreal to the real does demonstration give way to proof. "All A is B ; C is A ; therefore C is B," is demonstration because A, B and C are terms expressing unrealities. As soon as these terms represent realities, then conclusion ceases to be certain and becomes only probable. "A straight line," we may say, "is the shortest distance between the points it connects ; the railroad between Baltimore and Washington is a straight line : therefore it is the shortest distance between the points it connects." All is well with our syllogism as long as we deal with imaginary properties. But the moment we assume any fact in our minor premise—*e.g.*, that the road between any two places is straight—then our conclusion can only be approximately correct.

An analogous truth is that accuracy of foreknowledge never co-exists with liberty of action. Our certainty of the future is conditioned by our power of controlling the future. We can foresee the return of a comet, which can never touch us, and which we cannot avert, but we cannot foresee the eruption of a volcano from which we could have escaped, or the rush of a freshet against which we could set up barriers. When our feet are fettered, the telescope of the future may be consulted by us ; when our action is unfettered, the lid of that telescope is shut. We are like falcons whose eyes are hooded when their

feet are free, and whose feet are tied when their eyes are uncovered.

It may not be out of place to notice the fanaticism which flows from the assumption that moral truth is susceptible of demonstration as distinguished from proof. If it be assumed that a conclusion is demonstrated, then the doubters as to such conclusion are to be treated with no tenderness. A doubter we have to regard as either a fool or a knave. To this misconception of the nature of proof with its consequent intolerance we owe a large portion of the fanaticism by which the world has been desolated. In Mr. Symond's striking work on the Renaissance in Italy, the failure in Italy to construct constitutional and free institutions is traced to the existence for centuries side by side of two classes of irreconcilable politicians: the pure democrats who would tolerate nothing but unadulterated democracy, and the pure despots who clung with equal intolerance to *jure divino* absolutism. We find the same collision in France at the time of the great revolution between the fanaticism of the old loyalists and the fanaticism of the clubs; and Bismarck in one of his recent speeches has lately told us how difficult it is to keep the peace between the irreconcilable radical on the one side and the irreconcilable aristocrat on the other side. In religion the same fallacy has produced even greater mischiefs. "Our dogmas are demonstrated," so cries sect after sect, "hence we have no toleration for doubt." A canned infallible church, or a canned infallible creed, has thus, it has been supposed, been prepared by Providence for the believer; and what we have thus given to us we are to regard as absolute truth, hermetically sealed from the air of criticism. But God has provided no such mode for the communication of truth free from the modifying influences of time, and from the imperfections incident to all human transmission of thought. Holy Scriptures, in which He has deposited His revelation, come to us with a title to be proved, with the corruptions of centuries to be removed, and with an interpretation to be settled by processes as to which intelligent critics may differ. This we are beginning to learn, and as we learn, tenderness for doubt takes the place of the fanatical conviction that doubt is to be destroyed by fire and steel. Not merely, however, in the region of politics and religion is

this fanaticism to be seen. We have lately shuddered at the desolation of Turkish homes by Russians, and of Bulgarian homes by Turks. We have been shocked at the fanaticism which destroys mosque or chapel whence the village worshippers were accustomed to draw at least the consolations of a peaceful hereafter when this stormy and wearisome life is past. Yet, in view of the myriads of poor and sorrowful persons to whose life the sole consolation is to be found in the means of grace and hope of glory—in view of the steadiness religious belief imparts to the character—in view of the grief and sickness, and the fear of death, otherwise without relief, which are the lot of all men—what fanaticism could be more cruel than that of him who, from the fortress of some popular specialty, hurls the bombs of his atheism at religious faith? “It is demonstrated there is no God,” and the illogical fanatic of unbelief, with this cry, bombards the peaceful homes where the faith of multitudes is enshrined.<sup>1</sup>

The fallacy of the demand for the demonstration of religious truth can be readily illustrated. Supposing, for instance, the major premise to be, “without demonstration no matter of fact is to be believed,” then we may insert in the minor premise any fact of physical science we choose, and if the major premise be true, then the conclusion follows that such fact is not to be believed. But there is no fact of science with which we have any practical relation which can be demonstrated. It is a demonstrable conclusion, for instance, that two bodies that are equal to a third are equal to each other, and on this our whole system of measurement and weight rests. The proposition, however, as we now give it, is an abstraction, touching in no respect our practical life. When we come to the practical question, whether, for instance, two yards of cloth, separately measured by the same standard, have the same length, or whether two pounds of coffee weighed separately in the same

<sup>1</sup>Mr. Jevons, in the admirable treatise already quoted, thus speaks of the fanaticism of the ultra physicists: “The too exclusive study of particular branches of physical science seems in some cases to generate an over-confident and dogmatic spirit. Rejoicing in the success with which a few groups of facts are brought beneath the apparent sway of laws, the investigator assumes that he is close upon the ultimate springs of being.”—Jevons’ *Principles of Science*, II. 429. See the same point well treated in Bowen’s *Metaphysics and Ethics*, 20.

scales have the same weight, then a conclusion can be only proximately reached.

I may turn for further illustration to physical science when in her most solemn attitude, when she stands with uplifted hand in the witness-box, and swears, by the most sacred sanctions that the law can propose, to tell, as to the particular matters propounded to her, the truth, the whole truth, and nothing but the truth. The cases in which she is thus required to speak are not rare or exceptional. There is no topic, humble or sublime, within the whole range of physical investigation, as to which she is not called upon to testify. Wherever there is a specialty in which there is an expert, there the expert may be examined as to the specialty. Hence we have had experts examined as to the measurements by astronomers of the stars and as to the measurements by tailors of coats. We have had experts examined as to the habits of fish seeking to ascend in the spring on Maine rivers, and as to the habits of cattle as they sweep in droves over the Texas plains. We have had them examined as to whether sewerage produces certain infusoria, and whether these infusoria produce pestilence. There is not a poison as to which their testimony is not invoked; there is not a wound whose effects they may not be called to detail. What the telescope can assure us of; what the microscope can assure us of; what we can be assured of by chemical tests; what we can be assured of by careful induction produced by long and accurate observation—as to all these lines of information experts are summoned to give in their testimony under oath. They are, in the main, highly cultivated men, sensitively conscientious as to the truth. They are usually selected from among the front ranks of their specialties. They have ample time given to them for their investigations. They are liberally paid for their services so as to enable them to take any trouble requisite for their special inquiries. Yet, notwithstanding this, there is scarcely a case in which expert testimony is summoned in which we do not find, after two or three experts have testified on one side, about the same number ready to testify on the other side. Not only do they give us in their evidence, no matter how positive may be their assertions, probable proof as distinguished from absolute demonstration, but, after they are

through, so far from having a certain result on which we can implicitly depend, we are obliged to begin our processes anew by deciding, with understandings often made the darker by the mass of contradictory assertions we have heard, as to which expert is to be believed.

Human disease, to take a prominent illustration, is an object to which physical science has been directed for centuries, and is the topic as to which, of all others that concern it, society feels the deepest interest. On the education of those devoting themselves to this study the greatest care and expense have been lavished ; they have been protected by legislation from the intrusion of impostors or of persons imperfectly trained ; they constitute a profession not only highly honorable and generously remunerated, but embracing some of the most intelligent, cultivated, benevolent, and high-minded men by whom society is adorned. Yet not only does medical science in our generation reject the remedies which it regarded as indispensable in a previous generation, but there are no litigated issues in medicine or surgery as to which eminent specialists are not found to testify on both sides. Is it material to determine, as in Fisk's case, whether death was caused by the assassin's pistol or by the maltreatment of the attending surgeon ? Two or three specialists are called by the defence to swear that it was maltreatment that caused the death, and then about as many by the prosecution to swear that the death flowed in immediate sequence from the pistol wound. Is it essential to know whether certain symptoms in a sick person were produced by a particular poison ? Here, as in Palmer's case, we have the same inevitable conflict. That such should be the case ; that physical science should be elastic and progressive ; that it should move onward, as do all other sciences, with fluctuating step ; that its advance should be attended with the battle of collision in its ranks ; that it should be incapable of demonstrating any fact which touches moral agency so as to make that fact absolutely true—in all this it answers to the conditions of all sciences which affect humanity, which, the moment they penetrate the atmosphere that encompasses moral action, are enveloped in the hazes of that atmosphere, and move tremulously and occasionally with mistaken step. They can, therefore, only reach

results which, however probable, are open to doubt and contradiction.<sup>1</sup>

The microscope, to take another illustration, is supposed to give exact results, and the discoveries of the microscope, as well as those of the telescope, are frequently spoken of as demonstrations. Yet what more important question can the microscope approach than that which relates to the distinguishing qualities of human blood, and what more tremendous issue can there be than that which is presented when the life of a human being on trial is made to depend upon the testimony of a microscopist? Yet, when entering this critical region, the microscopist, no matter how exquisite may be his instruments, and no matter how ostensibly exhaustive and decisive may be his tests, finds that he is beset with the same infirmities as affect other specialists when deposing as to the application of theory to human conduct. His sight becomes uncertain, and his utterance confused. Sometimes, indeed, we have displayed to us experts boldly swearing on the one side that certain dry blood is human, and experts on the other side swearing with equal boldness that it is not human. But, as a general rule, the accomplished and conscientious expert is obliged to admit that, no matter how accurate may be his tests speculatively, they are not such as to produce that certainty that would make them a safe basis for conviction.<sup>2</sup> "In some instances," says Dr. Lionel S. Beale, "although after examination we may feel pretty sure

<sup>1</sup> Mr. Erichson, an English surgeon, in a late article in the *Lancet*, after attempting to show that the trial of litigated issues in surgery should be transferred to a jury of experts, makes the following remarkable statement, which comes, let it be remembered, from a critic not averse to expert testimony, but seeking to clothe experts with juridical powers: "There is no distinct precedent or rule of practice to guide the surgeon in the formation of his opinion. If all men were cut out of the same block; if all accidents produced exactly the same effects; if all patients had the same skilled surgical attendance and careful nursing; if there were the same freedom from care or the same amount of tenacity in all; if, in fact, all circumstances, moral and physical, were equal in individuals who were exactly alike, every surgeon would form the same opinion, and no conflict could occur. But as it happens that every one of these circumstances is unequal—and to what extent the inequality extends is not always easily ascertainable—the surgeon has no positive data to go upon, and must often give a somewhat empirical opinion as to the future condition of the patient."—London *Law Times* April 18, 1878.

<sup>2</sup> "The Microscope in Evidence," 4th ed., London, 1878, p. 266.

in our own minds as to the real nature of the blood, I can hardly think that in any given case the scientific evidence in favor of a particular blood-stain being caused by human blood, will be of a kind that ought to be considered sufficiently conclusive to be adduced, for example, against a prisoner on his trial." A microscopist of the highest rank, therefore, viewing the question from the stand-point of a teacher, declares that the tests, no matter how full of assurance to the experimenter, cannot be made the basis on which a verdict ought to rest; yet there is not a homicide trial where the question is material, in which one set of eminent experts do not swear unhesitatingly that they have been able to identify dried blood as human, while another set swear with the same positiveness to just the contrary. In other words, in a question involving human life, and in a matter we would suppose demonstration would be secured, if in a litigated case it is ever to be reached, physical science, when it enters the atmosphere of moral action, finds itself subjected to the conditions of that atmosphere. It cannot demonstrate. It can do well if it can prove.

I may be pardoned for one more illustration. Ten years ago a suit was brought in the United States Circuit Court, in Boston, by a lady of New York, to recover her deceased aunt's estate, amounting to two millions of dollars. The plaintiff's case rested on two writings, by which it was alleged the aunt agreed, in consideration of a will concurrently executed by the niece in favor of the aunt, to leave her entire estate to the niece, and to do nothing to revoke a prior will to that effect in the niece's hands. The defendants set up a subsequent will by the aunt, by which half of the aunt's property was given to the niece, the remainder being distributed among the testator's relatives and friends; and it was maintained by the defendants that the alleged writings, on which the plaintiff relied, as binding the testator to make no subsequent will, were forgeries. Upon this issue a vast amount of evidence was taken. The defendants' case was that the signatures to the contested documents not only bore on their face, in the shape of the letters, the marks of forgery, but that they were evidently produced by being traced over the signature to the prior indisputed will in

the niece's possession. Three distinct lines of expert testimony were invoked. The first was as to whether the contested signatures, compared with other signatures of the testator, were on their face forgeries; and whether (apart from the question of tracing) they bore the marks of the constraint and tremulousness which distinguish forged writings. The testimony being before an examiner, who had no power to exclude on the ground of cumulativeness, the parties ransacked the land for witnesses whose authority, in this respect, would be likely to have weight. Photographers were employed at an enormous expense to reproduce, in various exaggerated scales, the signatures, and then testimony was taken by each side to prove and to disprove the allegation that the photographers employed on the other side were not reliable. Presidents of commercial colleges and popular teachers of penmanship were torn from their classes, and sequestered so as to give weeks of uninterrupted study to the contested writings, and the standards with which they were to be compared. Bank presidents and bank tellers were examined and cross-examined for the same purpose. A distinguished member of the Coast Survey was brought from Washington, and was called upon to give his observations on the same subject at great length. Engravers, who had spent years in poring over lines of writings and of drawings, and whose eyes were trained to the most exquisite delicacy of perception, so that the faintest aberrations could be discovered by them, were also summoned to give their aid. The result of the combination of testimony was, that about as many experts were produced to swear that the contested signatures were forged, as there were to swear that these signatures were genuine.

But this was followed by a still more extraordinary phenomenon. If there is any thing that is demonstrable, we would hold that whether one line coincides with another could be demonstrated. In the case before us, a million of dollars hung upon the question whether the words of the testator's name, in the contested writings, exactly coincided with the same name in the uncontested will held by the plaintiff. Upon this question Professor Benjamin Pierce, of Harvard College, one of the most deservedly authoritative of living mathematician's, was

called, and testified that the chances of the genuine production of such a coincidence as that of the three signatures was that of one to two thousand six hundred and sixty-six millions of millions of millions of times (2,666,000,000,000,000,000,000). He naturally added that "this number far transcends human experience. So vast an improbability is practically an impossibility. Such evanescent shadows of probability cannot belong to actual life. . . . Under a solemn sense of the responsibility involved in the assertion, I declare that the coincidence which has here occurred must have had its origin in an intention to produce it." He added that there were other conditions which multiplied the improbability of undesigned coincidence by at least two hundred millions. His testimony was sustained by that of his son, Professor Charles Pierce, and that of several other microscopists and experts in penmanship, who swore that the two signatures alleged to be spurious coincided exactly with the standard from which it was assumed they were copied. On the other side, to meet Professor Pierce's testimony, the plaintiffs produced a series of signatures of John Quincy Adams, of George C. Wilde, of C. A. Walker, and of the examining magistrate F. W. Palfrey, in which, even when greatly enlarged by photographs, there were many cases of coincidence sworn by experts to be far more exact than those to which Professor Pierce assigned so high a standard of improbability. And as to the particular signatures immediately in dispute, there was a mass of expert testimony to the effect that so far from coinciding, no single letter in them exactly covered the alleged standard. Yet if there be a question as to which we could suppose it possible to obtain *démonstration*, it would be as to whether a series of lines coincide.

The remaining conflict is, if possible, even still more extraordinary. Were the marks of tracing discoverable under the ink of the disputed signatures? If such tracing is apparent to one microscopist, we would suppose that it would be apparent to other microscopists, using instruments of similar grade, and with the same power of eyesight. Yet we have Dr. Charles T. Jackson, a specialist in this line of extraordinary skill and reputation, and Professor Horsford, well known for his accomplishments in the same line, backed by other experts of dis-

tinction, testifying positively and unreservedly that under the ink of the disputed signatures the microscope brought to light marks of tracing; while Professor Agassiz and Professor Oliver Wendell Holmes testified that the microscope brought to light no such marks. It would be impossible to select experts more eminent and more unimpeachable. Yet as to a question which we would suppose to be peculiarly susceptible of demonstration—as to whether a particular microscope can detect certain marks—these experts, in the most unqualified manner swore to contradictory opposites. By Dr. Jackson and Professor Horsford these marks are “demonstrated.” By Professor Agassiz and Professor Holmes it is “demonstrated” they do not exist.<sup>1</sup> Of this contradiction there is but one explanation. When even the most exact of physical sciences undertakes to enter into practical life, it is beset with the same incertitudes that beset whatever appeals to our moral judgment. It can demonstrate only things that do not affect our action. As to things that affect our action, the best it can do is to establish a preponderance of proof.

The conclusion, then, is, that even by physical science, facts, as facts, while capable of proof, are incapable of demonstration. If, therefore, we are to accept as binding the sceptical axiom that nothing is to be believed that cannot be demonstrated, then as the facts testified by physical science cannot be demonstrated, it follows that they are not to be believed. But as they are to be believed—as on them we depend for most of our practical conclusions—then it follows that demonstration is not the test of moral proof. And when we find that there is no fact of any class that is demonstrated to us, then we rise by induction to the general rule that proof, not demonstration, is the condition of belief.

Bishop Butler devoted his great intellect to proving that we cannot stab the God of Revelation without first piercing through the heart of the God of Nature. I have endeavored, in the preceding pages, to show that there are other manifestations of Deity which intervene, interposing themselves as shields between Christ and those by whom Christ is assailed. Divinity exhib-

<sup>1</sup> For an interesting review of this important case see 4 Am. Law Jour. 625.

iting itself in jurisprudence stands in the way. It is not that human laws and human governments are *jure divino*; but that feature in human law which makes duty and responsibility questions of fact, to be determined on probable evidence, and always open to doubt, is part of our divine system of education, and must be destroyed if we establish the principle that only that which is to be demonstrated is to be believed. So divinity exhibiting itself in physical science stands in the way. It is not that any speculations of science are inspired, vastly as those speculations have contributed to increase the stores of knowledge, and to stimulate the movement of thought. But it is because the physical sciences, when they touch man in the concrete, are eminently among the ministers of Providence for the amelioration of humanity. "Counsel is mine and sound wisdom," says Christ, in the eighth chapter of the Book of Proverbs, ". . . by me kings reign and princes execute justice; . . . when He prepared the heavens I was there, . . . rejoicing in the habitable parts of His earth; and my delights were with the sons of men." Through what physical science has done in the multiplication of the comforts of life, in the relief of its pains, in the extension of its delights, in the opening of invigorating fields of activity and exulting spheres of thought —through all these agencies Christ works. But each of these agencies, when approaching human action, and offering itself to human choice, passes through the region of the shadows. Demonstrate it cannot. Prove it may, yet its proof is always open to doubt. Educated by doubt and temptation we must be; by exercise our reasoning faculties must grow; by resistance must our moral powers be strengthened; choice, which involves alternatives for choosing, we must always have; and whatever approaches us, offering to us bounties no matter how great, subjects itself to this law. Jurisprudence does this; and Physical Science does this. If demonstration is essential to the reception of the teachings of either, then the teachings of neither can be received. Scepticism, requiring demonstration for its satisfaction, must pass over dead Jurisprudence and dead Science before it reaches a dead Christ.

FRANCIS WHARTON.

## METHODS OF HOME-EVANGELIZATION.

**I**N the history of the world we are but too familiar with the fact that many a piece of work that appeared to be done once for all has to be done over again. Jerichos that seemed to be levelled with the ground never to rise have a wonderful knack of restoring themselves ; while holy cities like Jerusalem, that appeared to be built on immovable foundations and surrounded with impregnable bulwarks, are constantly tending to become dilapidated. Who that lived in the days of Luther and Calvin could have dreamt that the rotten superstition which, like Babylon the Great, seemed to be crushed and cursed forever, would regain its courage and its power, and seriously threaten the liberties of the world ? Who that saw old giant Pope in the days of John Bunyan gnashing his toothless jaws would have believed that towards the end of the nineteenth century he would have renewed his youth, gulled millions into the belief of his infallibility, and revived and sent forth his old claims to supreme dominion, *urbi et orbi*? Who would have thought that after witches and witchcraft had got their quietus in the seventeenth century, and the ashes of many a wretched creature done cruelly to death had shown what was thought then of pretended or real intercourse with spirits and devils, Spiritualism would become a great fact in this enlightened age ? Here, as elsewhere, it is the unexpected that happens. We are not done with the influences that make the first last, and the last first. And we are not done with the military necessity that demands a constant vigilance over the positions both of our enemy and ourselves. In short, we must fix it in our minds as an axiom, that old enemies have a wonderful power of coming back to life, and that old battles must often be fought anew.

The necessity that urges the Christian Church at the present day to vigorous action for the more thorough evangelization of our home population illustrates these remarks. In former days it was the common belief, that when communities were once converted to Christianity, they would remain thereafter at least nominally Christian. The only work of conversion believed to be needed in such communities was the turning of nominal into real Christians, turning men from a mere outward to an inward belief, giving them the power as well as the form of godliness. In these days, however, we have become painfully aware that a large class of the population tends to a state of absolute irreligion, and though living under the shadow of innumerable churches, and breathing, as it were, a Christian atmosphere, is wholly negligent of the services of Christianity, and dead to the faith and hope of the Gospel. Up to the present time, this class in Great Britain has usually been found in large towns, or in villages that have suddenly expanded, or in localities where some new mining or manufacturing interest has brought together a great heterogeneous population. But in Scotland, at this moment, the same tendency is showing itself at quite another point of the social scale. In our agricultural population, in the class of people most removed from modern influences, among the farm-servants or hinds, as they are called, neglect of Christian ordinances is becoming more and more common. They appear to have been seized with a kind of epidemic ; for, while of course there are many noble and notable exceptions, the testimony of ministers, not of one denomination, but of all, is that as a class they are undergoing a painful and rapid change, and becoming more separate from the ordinances and the influence of the Christian Church. It seems at present as if a new form of home-heathenism were about to appear in Scotland, as well as in other countries similarly situated ; and as if the Christian Church were to be called to devise some new method of reconquering this important part of the population to Christ.

It is our purpose in this article to explain and review some of the principal methods by which it has been attempted during the last thirty or forty years to effect the reconquest of lapsed populations to Christianity. Readers of the PRINCETON REVIEW will probably not object if we place Scotland in the fore-

ground of this survey. Here, at least, we would construct our base, extending our operations wider, like the trigonometrists, when we have made sure of our initial triangle. The area is indeed a small one—very small, doubtless, in American eyes—but ecclesiastically Scotland has long been a typical country, and the very compactness of the territory fits it better for experimental purposes. It is always an advantage for a testing experiment when it is conducted within narrow limits, because you can the more surely trace the action of the particular forces whose value you wish to ascertain.

The arrangements for the spiritual wants of Scotland at the Reformation were tolerably complete, especially where the population was considerable, the greatest defect being in thinly peopled rural districts, particularly in the Gaelic-speaking Highlands, where parishes might be found fifty miles in length. But more important than any external provision for divine ordinances was the influence of the public sentiment regarding them, which was earnestly and most successfully fostered by the Reformed Church. The church-feeling of the Reformers and Covenanters was very strong, and the measures which they took to secure a becoming regard from the people for the church and its ordinances were of corresponding stringency. It cannot fairly be denied that a measure of intolerance characterized the time, and that this helped to foster the habit of universal attendance at the services of the sanctuary. Buckle has palpably exaggerated this, for, according to him, the whole religious profession of Scotland was a superstition or a sham, and was due to influences as hollow and unworthy as itself. It is enough here to recall the maxim *ex nihilo nihil fit*; for if the whole religious movement was hollow, we have simply to ask, Whence came the noble spirit of freedom, the noble struggles unto death for the liberties of the country, civil and ecclesiastical? Whence came that sturdy, laborious character for which the Scotch have been remarkable, that broad intelligence and moral energy which have made Scotchmen what they are? The truth is, that if there had not been in the Scotch people a disposition to give great respect to the church and its ordinances, the Reformers and Covenanters would not have been able to establish the rigid discipline which bore so hard on the lazy and indifferent. The two forces

worked together : the active, intelligent, and well-disposed part of the people had a strong love and regard for the church, and the church had a strong discipline, stretched perhaps to the point of intolerance, for those who did not care for her ordinances ; and between the two home-heathenism got little or no footing—a lapsed class was not to be found.

The change began with the relaxation of earnestness that followed the restoration of lay-patronage in 1712. As the century wore on, and warm preaching of the Gospel became more rare, the love of many for Christian ordinances began to wax cold. Men cannot be expected to care for ordinances where there is nothing to meet their spiritual cravings and moral needs ; nothing to bring peace to their consciences, or to allay remorse and foster hope ; nothing to ease the pressure of their burdens, blunt the edge of their anxieties, or still the rebellious tumult in their hearts, of sorrow, disappointment, and fear. Bethel must be Bethel, if men are to love it and frequent it ; it must have its ladder going up to heaven, and the angels of God ascending and descending upon it. Along with this change there came naturally the relaxation of discipline—a disposition on the part of the ministers to take things easily, and to let the people take them easily too. Where forced settlements took place, the people usually left the church and joined the seceders. Where the appointments to the ministry were unsatisfactory, but not scandalous, the people naturally sunk into a state of indifference ; if they went to church, it was as a form ; and, as they found nothing like the real Bethel, the idea of such a place vanished from their minds.

Meanwhile the population was increasing, and the epoch of great cities was beginning. People were flocking from the rural parishes, where there was no outlet for redundant population, and were finding employment in the towns. Here, either because they found themselves strangers, and shrunk from having this fact forced painfully on their notice on Sundays ; or because the church services were cold and lordly ; or because, accustomed to a careless country ministry, the new-comers had no appetite for any thing they found in the churches, they began to give up their church-going habits. A lapsed class began slowly but steadily to form. The only provision for the growing population consisted in the churches of the seceders and an

occasional "Chapel of Ease," added with great reluctance to the accommodation of the Established Church. But neither the evangelical party within the church nor the seceders outside of it, with all their evangelical ardor, had their attention so turned to the growing evil as to become fully cognizant of it, or attempt to grapple with it in its true significance and force. In regard to the seceders, the case was peculiar. Laboring under every kind of social discouragement, they had great difficulty in securing even standing ground for themselves. Ecclesiastically their great aim was to obtain a mere *modus vivendi*. Even if they had been disposed, they could not have organized any effective method for overtaking the lapsed classes. The Established Church would have resented any such proposal as a piece of insufferable arrogance. The long experience of this kind of the early seceders has left its mark even to this day, with the result that the United Presbyterian Church has ever been more zealous for foreign than for home evangelization. Besides this, we may remark that in their preaching the great Secession ministers did not much work into the evangelistic vein. In the sermons of Ralph and Ebenezer Erskine we hardly ever find a sentence bearing directly on the duty of the church to those who did not attend ordinances. These earnest and devoted men felt that their mission was to maintain and proclaim the doctrines of grace; and to that great object they devoted the whole energies of their lives.

It was reserved for Dr. Chalmers, when he became a minister in Glasgow, to discover the full extent of the evil,<sup>1</sup> to proclaim the remedy, and to summon the Christian community to the rescue. Glasgow was and is by far the most striking instance in Scotland of a rapidly increasing community. In company with the late Mr. Collins, well known as an enterprising and successful publisher (in which capacity he has a worthy son and successor in the present Lord Provost of Glasgow), and with other laymen, Dr. Chalmers, during his eight years' Glasgow ministry (1815-1823), had been immersed in the reconquest, first of the Tron Parish, and latterly of St. John's. We need not rehearse his memora-

<sup>1</sup> An ecclesiastical commission, appointed by the Crown, afterwards made it known that about one third the population of Edinburgh and Glasgow were living without any religious connection or profession.

ble effort to enlist the aid of the government in his scheme of church extension—an effort which led ultimately to consequences so opposite to those which he contemplated. Though he failed in getting that aid, Dr. Chalmers did what was far more vital—he succeeded in arousing the Christian community to a sense of the evil that had arisen, and in carrying to a triumphant issue a splendid instalment of the needed remedy. Twenty new churches for Glasgow had been his aim when he was laboring there ; but when, some years after, in 1834, the cause was pled before the General Assembly, the scheme which he advocated was two hundred new churches for the whole of Scotland. It was then the day of small things ; but when, in the course of a few years, this undertaking was triumphantly completed, it was felt to mark a new era in the history of Christian enterprise, although it was but the vestibule of a much greater achievement soon to follow.

Dr. Chalmers found it very hard work in his time, as it is hard work still, to get attention fixed on the more vital features of the plan which he advocated. The building of the two hundred churches was not the most essential feature of his scheme. He desired the churches only as centres of a complete parochial machinery. His love for the old parochial system of Scotland, by which the labors and efforts of the clergyman were mainly limited to a definite territorial district, was very strong. That system embraced, in each parochial district, a minister and kirk session—that is, a body of elders, whose duty was to assist the minister in the more spiritual duties of his office, as well as a body of deacons, who were charged with the care of the poor. At that time the school was an adjunct of the church, and the two hundred new churches were to be accompanied by two hundred schools. Round this establishment of church and school, with minister, elders, deacons, and teachers, the whole Christian machinery of the parish was to revolve. Whatever further organizations might be needed—Sunday-school, missionary or Bible society, savings-bank, young men's association, or the like—all was to be articulated with this parochial backbone. In a sense, but certainly not in the common sense of the term, the mind of Chalmers was parochial. Through the blessing of God on the labors of the minister and his staff, he looked in

each district for the creation of a strong parochial eddy, the effect of which would be to bring the people into contact with the church, and their children with the schools, and thus restore the lapsed families of the locality to the regular observance of divine ordinances. The minister, however, was to be eminently aggressive, and so also were his coadjutors. They were to visit the people in their dwellings ; they were to go about actively among them, especially those who were neglecting divine ordinances, trying to lead them to Christ, and as intent on every office of Christian love and kindness as if they had been foreign missionaries. Dr. Chalmers laid such stress on this feature that he named his scheme by the term "aggressive," as distinguished from the "attractive." His aim was to go to the people and thus induce the people to come to him ; it was to create anew the desire for the ordinances of God's house ; to rekindle feelings that had slumbered long, but that might even yet respond to an earnest, affectionate appeal, mayhap to the memory of better days, or to the example of God-fearing parents, but certainly to the voice of conscience, declaring the sin and shame of godlessness, and the blessedness of the people that know the joyful sound.

In some cases the people responded almost as readily as Roderick Dhu's followers started to the call of their chieftain. The churches were often, not always, filled as soon as they were opened. The present writer remembers very vividly being present in his student days in the first church of this kind that was built in the city of Aberdeen, a few weeks after the settlement of its first minister. The large church was already filled, and there was something in the appearance of the people that indicated that they belonged to the neighborhood, and that they were undergoing a new experience. Several things may account for this rapid success. The scheme was entirely new. The people, long neglected both by church and state, were gratified at the sight of a church erected for their benefit, and pleased with so rare an event as a friendly call from the minister and invitation to attend the church. The old church-respecting traditions of the country still retained a considerable force. The parochial system, with its neighborly and kindly recognitions, its care for the poor and its care for the young,

continued to maintain a strong hold upon the people. Neglect of ordinances had not yet ceased to carry with it a certain social stigma, from which many shrunk. Moreover, the preaching of the Gospel in those days was fresh and very winning, and many of the young ministers were men of intellectual mark and much spiritual earnestness. It was in charges of this class that Robert McCheyne, Horatius Bonar, William Arnot, Alexander Moody Stuart, and others like-minded, were first settled. Such men broke up the fallow ground ; they cultivated virgin soil ; they contributed very materially to promote the evangelical revival of the time. But these extension churches seldom reached the lowest strata of the people. It was reserved for another movement to go deeper down.

The Disruption of the Scottish National Church came in 1843, with its great moral earthquake and spiritual revival. From the beginning, Dr. Chalmers proclaimed his hope that the Christian people would now do what he could not get the government to undertake. Through the labors of the Church of Scotland Free, he hoped that measures would be taken to reclaim the whole of the lapsed families of the country, and that the ecclesiastical millennium which he had greatly desired to see, when the people who had strayed should be found in the footsteps of their God-fearing fathers, would yet be realized. As soon, therefore, as the more pressing necessities of the Free Church were provided for, Dr. Chalmers was back at his old work. So early as the 26th July, 1844, he wrote to his beloved friend and valued coadjutor, Mr. Lenox, of New York : "I have determined to assume a poor district of two thousand people, and superintend it myself, though it be a work greatly too much for my declining strength and means. Yet such do I hold to be the efficiency of the method, with the divine blessing, that perhaps, as the concluding act of my public life, I shall make the effort to exemplify what as yet I have only expounded." The district chosen, the West Port of Edinburgh, was one of the very poorest and most abandoned. It was full of squalid misery, three fourths of its people were connected with no church, and a larger number of its children with no school. Retaining the local principle, and determined to work it to the uttermost, Dr. Chalmers divided the district into twenty sub-districts, appoint-

ing a Christian lady or gentleman as a visitor to each. The visitors met with him once a week to report progress and receive encouragement. A missionary and a teacher were set to work. At first the enterprise seemed very hopeless. The fruit of the whole exertions of the twenty visitors brought to the first meeting only a dozen or so of adults, and these mostly old women. But perseverance and prayer prevailed in the end. In 1847 a church and school were opened, built for the locality ; five sixths of the sittings were let, mostly to West Port people, and the school was crowded. On the 27th February, 1847, just three months before his death, Dr. Chalmers wrote to Mr. Lenox, communicating these and other particulars, and telling him that this was the most joyful event in his life.<sup>1</sup> It seemed the pledge and assurance that all over the Free Church, and throughout all the churches, the experiment would be repeated till the glorious consummation should be reached.

Thirty years have elapsed, much has been done, and yet the problem of evangelization has not been solved. In Edinburgh some eight or ten territorial churches have been built by the Free Church alone, chiefly in the poorest localities ; while there is hardly a congregation of the Free Church with any life and resources that does not cultivate a territorial mission, trying to bring the negligent families within it under Christian influences. In Glasgow there has been a striking and most interesting territorial movement. It owed its birth to a lecture delivered in March, 1845, by Dr. Chalmers, in the Free Tron Church, on congregational missions ; after which Dr. Buchanan and the kirk seession of the Free Tron Church set to work vigorously in one of the worst districts of the city—the Wynds. The story has often been told, and is told at length in the recent Memoir of Dr. Buchanan by the Rev. Norman L. Walker. The success of the Wynd Church among the lowest class of the people was wonderful. The territorial operations were greatly aided by a breath of revival which swept over the district. Begun in 1854, the Wynd Church became a mother in 1860. Bridgegate Church was built ; the Wynd minister removed thither, and a new minister was got for the Wynds. Four years later the Wynd Church

<sup>1</sup> The letters to Mr. Lenox are given in full in the volume of Dr. Chalmers' "Correspondence," a supplement to the Memoirs of his life.

gave birth to a second daughter, named Trinity. In 1867 her third daughter, Barony, came on the scene. By and by Trinity brought forth Govan, and the Wynd brought forth her fourth child, Augustine. We cannot follow all the ramifications of this wonderful process of increase and multiply. It is the old story of the polyp—split it in two, and each half becomes an independent creature; split the halves, and the same thing occurs. You only need to allow a little time for the severed shoots, and the trunks from which they were severed, to gain a little strength, when you may repeat the process of multiplication. And all this work has been carried on mainly through the territorial principle. Constant visiting of the people in their houses, indefatigable efforts to draw out young and old, local organizations of every kind—schools, Sunday-schools, savings-banks, bands of hope, abstinence societies, prayer-meetings, kitchen lectures, soirées, mothers' meetings, evangelistic services—have all contributed their share, along with the main instrumentality—the public preaching of the Word. But the aggressive element has furnished the main-spring of the work. And this aggressive agency has not consisted merely of ministers and other office-bearers. One of the great features of the Wynd movement has been the enlisting of workers from the ranks of the common people. In some of the congregations there are as many as three hundred "workers." Working-men, clerks, women-servants, shop-keepers, as well as young merchants, students, and professional men, are all brought up to take a share. On Sunday forenoons, after divine service, they meet for prayer, then sally forth, with their bundle of tracts, to visit their districts and invite the people to the house of God. Their motto is, "Let him that heareth say, Come." Their ideal is the Psalmist's: "The Lord gave the word; great was the company of them that published it."<sup>1</sup>

Experience has fully verified the wisdom of Dr. Chalmers in

<sup>1</sup> In our active and earnest congregations periodical meetings of "the workers" have become an institution. All who are engaged in any part of the church's work spend an evening together, perhaps once in three months, and addresses are given fitted to guide and stimulate the actual workers and enlist the sympathies of more. These meetings are over and above the periodical meetings for prayer and consultation held from time to time among those who are engaged in each particular branch of the work.

the prominence which he gave to the territorial or local principle. The concentration of effort on a given district is in many ways most valuable. Not only is there more certainty of reaching all the people, but the influence of local feeling is brought into play, and the social power of neighborhood helps to uproot old habits and to substitute new. We think, however, it must be owned that Dr. Chalmers did not make allowance for a weak point in the territorial scheme. In districts degraded physically as well as morally, as surely as the people become elevated in character they leave the locality. Its social and general condition become repulsive to them as soon as they have acquired Christian ideas and sympathies. But though they may leave the district, they are unwilling to leave the congregation. It was here they first got good for their souls. Here they spent the morning of their spiritual life, when all was bright and fresh to them ; when, like the wise men of the East, on seeing the star, they rejoiced with exceeding great joy ; here were formed the bright memories of their spiritual youth ; here they found the joy of their espousals, when He who commanded the light to shine out of darkness revealed to them the glory of the Only-begotten, and their souls were wedded to their Lord. In this congregation they have their Christian friends, who know them and take an interest in them ; another church would be cold and unfamiliar. Dr. Chalmers did not consider how powerful such feelings are, when he contemplated the removal of the people to another local church, on their changing their locality, as an event that might readily be reckoned on, in the future working of his scheme. In point of fact, this has been one of the great drawbacks to its complete success. Let us take the case of the West Port Church, for example. It was a great success, and in its earlier years one might see at a glance that the congregation was a local one, and had recently belonged to a churchless community. But as these people have improved, they have gone to dwell in other parts of the town. Determined still to belong to their beloved congregation, many of them have not cut their connection with it. At the present moment the congregation is local only in a slight degree. The places of the people who left the district have been filled by others, many of them in the same state of heathenism as before. No doubt they are visited;

but where the church is full, there is not the same inducement to them as there was to the *aborigines* to respond to the call. The only remedy for this is for part of the congregation to go off to some other district, form a new congregation, and leave the original church as a new centre of evangelization. In several instances this has been done; especially in Glasgow; and were it carried out sufficiently, the whole destitution might perhaps be overtaken, although not wholly on the territorial plan.

It may be well here, as our object is a practical one, to indicate the manner in which this enterprise has been financed. In starting his West Port movement, Dr. Chalmers was indebted in a large degree to his personal friends. Of these, Mr. Lenox, of New York, was one of the chief. On 7th October, 1844, Dr. Chalmers acknowledges "a munificent donation of £200 in aid of our proceedings in the West Port." In July, 1845, he advertises to "the munificence by which you have conferred such facilities and enlargements on our operations in the West Port." In October, 1846, he says, "It may perhaps interest you to know that of the money received, which includes all your own most munificent donations, I got £300 from a lady, and four or five single hundreds from as many individuals. Lord Jeffrey, the celebrated Edinburgh Reviewer, is one of these, who takes a most friendly interest in our doings. I had many donors of £50, £20, £10, etc., etc.; and, what to me was extremely gratifying, upwards of two hundred subscriptions from the West Port itself, ranging from half a farthing to two pounds." In most cases the generosity of Christian friends has been largely requisitioned for similar enterprises. In Glasgow a general Church-building Fund has once and again aided the work; but the generous merchants of Glasgow have often found that their contributions to the general fund have had to be supplemented by donations to not a few of the special objects. In other instances some one of the older congregations with considerable resources has taken in hand not only to build the church, but to furnish the chief part of the mission staff. This is a much happier arrangement. It interests the wealthy congregation, furnishes work for its active members, and forms an interesting link between rich and poor. But care needs to be taken to prevent the relation between the two from looking like that of a superior to a vassal. It is

most desirable to call out in every way the resources, however small, of the people themselves, and teach them a lesson of self-reliance. Dr. Chalmers had pleasure in the two hundred contributions from the West Port, not merely because they helped to increase his building fund, but because they were an important step towards the education of the people in effort-making and self-reliance. If the people have any interest in an undertaking of the kind, they will be more hurt at being passed over than at being asked to subscribe.

But the church-building is only one step in the process : the maintenance of ordinances must be defrayed from year to year. Taking the Free Church method, in the first instance, as our text, we find that according to its plan, when a territorial mission is commenced by a neighboring congregation or by persons on the spot, under sanction of the Presbytery, the Home Mission Committee of the General Assembly gives a grant-in-aid for current expenses. If the mission prospers, and it is proposed to form it into a charge, the case is sent up by the Presbytery to the General Assembly, along with a statement of what the proposed congregation is able to undertake for the maintenance of a minister. If the Assembly approves, the place is sanctioned as a territorial charge ; in addition to its own contributions it receives from the Home Mission a grant of £100 a year, which after three years is diminished periodically, till at last it is entirely extinguished. By this time, however, the charge is probably taken on the Sustentation Fund, in which case the minister gets the "equal dividend," along with the other ministers of the church. If a new territorial charge shall call an ordained minister, the grant from the Home Mission may be £200 a year. This provision was adopted in order that in difficult districts men of experience might be procured to organize the new charges.

Where the population is great, and the minister suitable and earnest, the local funds of these charges are well sustained. The working classes are quite able to contribute small sums at short intervals, amounting to a considerable sum in the course of a year. Most of the new territorial charges in large towns are in a comfortable condition as regards finance.

The Established Church of Scotland has adopted a somewhat

different method of financing its new charges. Its great effort has been to endow them. When the Disruption happened in 1843, the Established Church found itself entitled by law to claim the two hundred extension churches built under Dr. Chalmers between 1834 and 1843. Most of the congregations of these charges adhered to the Free Church, and when the Established Church took possession it found the buildings without congregations and without revenue. The idea occurred that if they could be endowed, their condition would be greatly benefited; ministers might be found to accept the charges, and under them congregations gathered. This idea was earnestly and successfully carried out. By the year 1870 a hundred and fifty charges had been endowed. The minimum endowment was £3000, furnishing an annual income of about £120; and by a recent Act of Parliament it was enacted that when a charge obtained such an endowment, it should become a parish, *quoad sacra*, and its minister should be entitled to a seat in church courts. The charges thus endowed included several congregations altogether new, in addition to those which had fallen to the Establishment at the Disruption. In 1872 it was resolved to take measures for endowing one hundred additional charges. This was more than accomplished in 1877. Steps were also taken in 1877 for endeavoring to increase the endowment, so that the share of income thence arising should not be less than £150.

The success that has attended this enterprise, greatly stimulated from the fund presented by the late Mr. James Baird, and from other funds of the church, has contributed considerably to the evangelistic forces of the country, but not so much as might at first be supposed. Many of the churches existed before, but in an inefficient state. The additional churches built have not been more than sufficient to provide accommodation for the proportion of church-going people which the great addition that has taken place since 1843 to the population would give to the Established Church. So that, notwithstanding the very interesting and remarkable results which this scheme shows, it has made but a small contribution towards solving the problem of home-evangelization.

It must be evident to all that it would greatly help to solve

this problem in Scotland if the three great Presbyterian churches should come to some agreement together in regard to a division of the territory needing to be evangelized. The Established and the Free churches both like the territorial principle, and the United Presbyterians could have no difficulty in accepting it for mission purposes, all idea of *exclusive jurisdiction* within the particular district being disclaimed. The time was when some arrangement of this kind, so reasonable in itself, seemed not unlikely to be made. But for the present any such scheme is far from hopeful. The Established Church has announced claims and projects which, if carried out, would be fatal to such a plan. In the report of the Endowment Committee to the General Assembly of 1875, it was affirmed to be "the deepening determination of a great majority of her members to recognize no limits to the work of her extension *short of a full and adequate provision for the spiritual wants of the whole country.*" If this be a true statement of what is sought, it is the purpose of the Established Church to go on with her extension apart from all other churches, until she has provided accommodation for all the people. Considering that the non-established Presbyterian bodies are more numerous than the Establishment, and certainly not behind it in zeal, in spiritual life, and in evangelistic energy and aptitude, this project is sufficiently strange. It is no part of our plan in this paper to criticise it; we only advert to it, in great sorrow, as showing how little prospect there is at present of such a combined territorial effort in Scotland as would, under God's blessing, turn the whole moral waste into the garden of the Lord. No doubt the project would be disowned by many, but by those who cherish it it would be a serious obstruction to any plan of general co-operation.

It will be readily observed that the working out of the scheme of Dr. Chalmers as an evangelistic scheme assumes the existence of a considerable share of evangelistic spirit in settled congregations. In every case of real mission work there is needed, besides the head of the mission—usually a probationer or licentiate—a band of earnest men and women to go about among the lapsed population, and endeavor to gain them to Christ. Now, it is evident that the fostering of this evangelistic spirit is the

first requisite to success in home missions. The idea of real success in reclaiming a lapsed community in any other way than through this spirit is at once carnal and foolish. In discussing the subject of home-evangelization, therefore, one of the most essential questions is, How is this evangelistic spirit to be fostered? And the final success of the home-mission enterprise among the lapsed must depend on the measure in which this spirit is evoked and the wisdom with which it is worked.

We need hardly remark that there can never be any efficient gospel preaching without the production of a *certain amount* of the evangelistic spirit. At the same time, as we have seen in our reference to the preaching of the Erskines, there may be a very earnest proclamation of the Gospel without a *special culture* of this spirit. But this defect, as we must hold it to have been, of the preaching of the Erskines and their contemporaries has been considerably remedied in the evangelical revival of the present day. Even in Dr. Chalmers' time the influence of the Gospel was beginning to be felt in the way of actively leading those who received its blessings to take something more than a casual interest in the Christian welfare of their brethren. But the development of this spirit has been promoted since that time to a much larger degree. It has advanced especially in connection with the Free Church movement, and emphatically in the congregations that have been formed on the territorial principle. The idea has gained ground that a Christian congregation does not exist merely for itself, and is not fulfilling its function when it merely keeps up ordinances for its own members; that, in fact, it is responsible for the evangelization of its neighborhood, and is bound to place its light in a candlestick, that it may give light to all who are in the house.

Moreover, the promotion of this evangelistic spirit has been one of the most marked fruits of the work that took place in Scotland a few years ago in connection with the visit of Mr. Moody. It was commonly remarked that Mr. Moody's work did not make much direct impression on the lapsed class. Some men of undoubted missionary spirit, like the late Dr. Duff, held aloof from it mainly on that ground. To a certain extent there was cause for the criticism: Mr. Moody's mission was chiefly to those who knew their Bibles, and its success arose chiefly from

the power he possessed to make Bible truth telling and vivid to many who knew it in the letter, but were strangers to its power. But there was this very remarkable evangelistic element in Mr. Moody's work—he constantly urged the duty of Christians to labor and pray for the conversion of their friends and neighbors. He fired them with an evangelistic ardor that could not rest. He sent them to their families, their shopmates, their fellow-servants, and urged them to do what they could to bring them to Christ. And the success of the work was far the greatest where this was done most extensively and prayerfully. There were workshops and localities where the impression was almost universal, and there were others quite untouched. In the one case, some ardent convert had spread the gospel invitation with irrepressible ardor ; in the other, there had been nothing of the kind.

Beyond all doubt, Mr. Moody's work had a remarkable influence in stimulating the evangelistic spirit of congregations in which there was any thing of the kind to stimulate. Where there were home-mission organizations, they got new life, and in other cases they sprung into existence. During the last four years, for example, the Free Church has greatly increased the number of its congregational missions—that is, missions undertaken by individual congregations in destitute districts of our cities, worked by a student-missionary, aided by zealous members of the congregation. And in many cases quite a new arrangement has been introduced—the “week of evangelistic meetings,” to which we will by and by allude. But the influence has not been merely congregational. It was one of the happy results of Mr. Moody's visit that it brought together earnest men of all denominations, and united them in common efforts to advance the kingdom of God, especially among the lowest class. The “Sunday Morning Free Breakfast” has been one fruit of this common work. In most of our large towns the waifs and wayfarers of the streets are supplied each Sunday morning with breakfast, and from this as a basis evangelistic efforts of various kinds are made to spring. Addresses are delivered, hymns are sung, services are held, the people are visited in their homes, when they have any, the young are brought together, classes are formed, and in many instances with blessed results. One thing

is very certain—the very lowest stratum of society is undoubtedly reached by this method. One has only to be present to learn, from the faces and figures of the people, to what a wretched level it is possible for humanity to sink; while further acquaintance with the work may show one from what horrible pits and miry clay the grace of God in Christ is able to deliver.

It is not believed, however, that, in the estimation of the best judges, the remarkable impulse to home-evangelization given by such work as that of Mr. Moody is fitted in any degree to supersede the territorial scheme of Dr. Chalmers, or render its methods unsuitable. On the contrary, without such a basis, the whiff of a revival movement would rapidly pass over without leaving much permanent result. The fresh earnestness kindled among Christian people would no doubt find channels of some sort, but not such as to propagate the impulse where it was most required. Suppose, on the other hand, a large community where the territorial machinery is in full operation. Under a wave of revival, the agents at work in the various territorial fields would in all likelihood be among the first to receive the benefit. Communicating with the people under them, they would probably be the means of propagating the interest to them, and bringing them into contact with the revival spirit. In this way the whole field would in some measure be influenced. And while the methods more peculiar to a revival movement, such as second meetings, the conversation of earnest believers in workshops, or mines, or schools, or among gangs or companies of persons in the same employment, would go on as usual, they would tell upon the more permanent modes of operation in well-organized districts. The revival would give a new impulse to the regular machinery without the disadvantage to which otherwise it might be liable, of being alike limited in area and transitory in duration.

If, then, the revival movement be a legitimate and useful supplement to the more stated methods of home-evangelization, the question arises, Ought the church to take any steps in order to bring about revivals, or ought she simply to avail herself of such movements when God in his sovereignty is pleased to bring them to pass? In reply to this, we may remark that the more staid and settled churches have hitherto been rather slow

in taking steps to bring about a revival, standing in some awe of what has sometimes been done in this way among certain of the Methodist sects. If, however, we speak of Scotland, we may say that the propriety of *certain* steps being taken at times, in order to deepen religious concern and rouse something of spiritual enthusiasm, is now very generally admitted and acted on in earnest congregations. In the Church of England, too, the mission-week is becoming a familiar word. The more godly people are invited to united and earnest prayer for an outpouring of the Holy Spirit, and nightly meetings are arranged, for a given time, at which Christian pastors and gentlemen of known zeal and fervor are asked to give addresses. Efforts are made to bring together all and sundry of the neighborhood ; and sinking all other questions, the speakers make the salvation of the soul their single object. In the first instance, such services touch those who are already church-going, but spiritually dead ; others, however, are sometimes brought in, and give evidence of a real change. That such movements do a measure of good in ordinary times cannot be doubted ; but it is only when a great wave of revival is passing over a district that meetings of this kind are eminently blessed.

Many questions have been started, and in some degree discussed in Scotland, regarding an Order of Evangelists, and likewise regarding the training and employment of subordinate evangelistic agents. These are in reality separate matters. The one question is substantially, Ought there to be, in the regular and ordinary ministry, a body of men termed Evangelists ? Ought certain ministers specially qualified to be set apart for the particular work of rousing languid congregations, and pressing on the undecided to declare for Christ ? To this question it is generally answered, that when ministers are given to a church with an eminent gift for this service, it is the church's duty to use the gift as widely as possible, and to arrange so that it shall be made available accordingly. A church having such men in her ranks as John Macdonald, or William Burns, or Alexander Somerville, ought to make great use of them for evangelistic service. If a sufficient supply of such men could be got, it would be of great use to have all the congregations visited and stirred up every few years. But they must be very genuine men, with

gifts and graces of the highest quality ; it is poor, indeed, when second or third class men have to be taken for a work which had better be let alone than done heavily or remissly.<sup>1</sup>

The question that relates to the employment of subordinate evangelistic agents—uneducated men who show much spiritual earnestness in combination with gifts as speakers—is one of considerable difficulty. In a time of great earnestness such men are often undoubtedly useful, and there is a great demand for their services. But in ordinary times the demand is less, and the evils connected with want of education and an inferior social position are apt to show themselves. These evils would be obviated in some degree by an institution for the training of such agents, under regular and responsible management. In no circumstances, however, can it be reasonably expected that the employment of this class of agents, however useful and necessary it may be, will be without some drawbacks. The experience of Jonathan Edwards and of Asahel Nettleton was adverse to their being regularly employed.

Ere we pass from the consideration of the more direct forms of evangelistic effort, we must advert briefly to a special enterprise begun in recent years with reference to the young. We do not refer to Ragged Schools, which have been so useful in rousing the attention of the Christian public to the neglected condition of the young, but for which the necessity in Scotland may be expected to decrease if the school-boards are able to make provision for the education of the whole juvenile population. The movement to which we now refer had its origin in Glasgow, and was started a few years ago under the name of the Glasgow Foundry Boys' Religious Society. Some Christian gentlemen, in the course of their philanthropic labors, had been brought into contact with boys employed in foundries, rude, rough, untaught, uncared for, and they instituted a religious

<sup>1</sup> The general opinion has been that the "Evangelist" of the New Testament was not intended to be a permanent officer in settled churches. He corresponds more to the "missionary," whose chief function is in heathen lands. But inasmuch as we have a residuum of heathenism even in Christian lands, the evangelist may still be needed. Our own opinion is that in regular churches a *stated provision* of evangelists is not very desirable ; it is better to use occasionally, for such purposes, the gifts of men who are found to be eminently fitted for so peculiar a service.

society for their benefit. Ere long it was found that many other classes of boys were in similar circumstances, and, though the original name was retained, the society was extended to admit them too. Girls, moreover, it was discovered, stood in need of similar efforts, and they too, in turn, found a place in the society. The object of the promoters was to combine something of military order and discipline with other objects, which may be expressed by the four terms *religious*, *educational*, *social*, and *provident*. The religious department of operations is conducted on Sunday mornings at the usual hour of public worship, and consists of a simple religious service, in which the singing of hymns has a prominent place, the object being not merely to communicate religious instruction, but to promote among the young people a spirit of reverence both for God's day and God's worship. Educational work is carried on on certain week-day evenings; and as to the social department, its aim is to give the children sound ideas on the subject of recreation, more especially in connection with music, and with excursions to the country. These last are wonderful occasions, not limited as in other bodies to a single day, but sometimes embracing a whole week. The *provident* branch of operations is conducted by means of a savings-bank, and other arrangements fitted to encourage a habit of looking forward to the future, and to show how easy it is to make provision for old age or sickness if the requisite steps be but begun in time.

This society has proved a most popular one in Glasgow, and has had the effect of bringing many thousands of young persons, who might otherwise have grown up wild and rude, into contact with some of the best of our Christian people, and under powerful Christian influences. To a certain extent the plan of the society has been adopted elsewhere, under the title of "Children's Churches;" but in no other place, so far as we are aware, has its fundamental idea been carried out—the combination of influences at once religious, educational, social, and economical. It is this combination that forms the most interesting feature of the Glasgow society. In fact, we know of hardly any other evangelistic movement that rests on so broad a basis. The restoration of our fallen nature is a compound process, and though in most cases it may be well to begin with the spiritual

part of it, and, having got it set right, leave the other parts to right themselves, yet there are risks in this method which the plan of the Foundry Boys' Society is adapted to obviate. We shall have occasion to return to this view ere we conclude our article.

In some of the movements which we have last adverted to the boundary has been passed which separates the evangelistic efforts of churches from those of societies constructed on a catholic basis. The territorial scheme of Dr. Chalmers is essentially a church scheme, and has been worked as such. But there are other agencies, like that which has just been adverted to, more general in their character, and having no special connection with any particular church. In noticing some of these we need not confine ourselves to Scotland.

The first we mention is the City Mission. The City Mission of London is the largest, and may be fairly regarded as a type of such agencies. Its managing committee consists of an equal number of members of the Established and nonconforming churches. We have before us its Forty-second Annual Report. It appears from this report that during the year 1876-7 it had a revenue of £45,450 15s. od., and that it had in its employment 442 missionaries. These men receive salaries varying from £67 10s. to £90. Their time is spent chiefly in domestic visitation, visiting the sick and dying, and holding meetings and Bible-classes. The object of the institution is "to extend the knowledge of the Gospel among the inhabitants of London and its vicinity (especially the poor), without any reference to denominational distinctions." All suitable means are taken to secure agents full of faith and the Holy Ghost, and thoroughly penetrated with the desire of saving souls. A certain amount of theological training is provided for them, communicated by one of the secretaries of the society. Usually, each missionary has a territorial district, except in the case of special missionaries appointed to visit cabmen, or public-houses, or told off for some other special work. Owing to the catholic character of the society, the missionaries are not allowed to form their converts into congregations; they only encourage them to join some existing church. They can thus take no advantage, or very little, of the *social* principle of our nature, in leading men into the ways

of the Lord. Hence the comparatively meagre results, according to the statistical returns, of so considerable an agency. In the year 1876-7, through the labors of the 442 missionaries, 1569 persons became communicants for the first time, being rather more than three to each missionary. From a recently published biography, that of the Rev. Dr. Brock, of Bloomsbury, London, a well-known Baptist minister, we find that in about twenty years he received a thousand communicants for the first time, or about fifty yearly, most of whom he was the instrument of turning to the Lord. Useful, therefore, though the London City Mission is beyond all doubt, its evangelistic results are but meagre, and it does not seem to contain either the promise or the potency of a very extensive evangelization.

The City Mission in Scotland is conducted on the same general principles. In Edinburgh it is a small institution, having but 8 district missionaries, 5 to special classes and 3 female agents, and, in addition, 10 affiliated missionaries, supported by other bodies. The reason of its small dimensions is, that so much mission-work is now done in Edinburgh, as in other Scotch towns, through congregations, that but few suitable portions of the mission-field are left unoccupied. In some instances, indeed, the workers overlap each other. Consequently, the City Mission does not attempt to do more than cultivate a few patches, and can only be regarded as a supplementary evangelistic agency. But it is admirably conducted, and many testimonies of great value have been borne to its usefulness. It claims a favorable notice for its missions to special classes—to cabmen, policemen, lodging-houses, fallen women, the blind, and public-houses. It is able thus to take up classes that as such cannot be embraced in ordinary parochial or congregational arrangements. Its annual reports do not furnish statistical returns like those of the London Society, so that we have no means of even approximating to its net results.

Allied in character to the City Mission are various missions to separate classes, under catholic societies, similarly constituted. Among these is the Scottish Coast Mission, the object of which is to pay attention to sailors and fishermen and their families, specially liable as these are, from the nature of sea-faring occupations, to irregular habits as to religious ordinances,

and requiring an amount of pastoral care which it is thought the ordinary ministry cannot, or at least does not, give. There are also, in some instances, missions to soldiers. Of Magdalen missions, it is enough to make mention, as seeking the reclamation of a class that must be dealt with separately. Prisons, poor-houses, and hospitals have usually, besides chaplains provided by the authorities, bands of Christian workers who seek the good of the inmates.

Less catholic in their constitution, but aiming at similar objects, we have the Scripture Readers' Association, the Pastoral Aid Society, and Home Mission Societies, supported chiefly by some of the Nonconformist churches in England. Such societies co-operate with the regular pastors, either in the pastoral care of those who are nominally members of their churches or in endeavoring to reclaim the home-heathen within their borders. There is nothing so peculiar in their methods as to claim special exposition.

The limits of our article oblige us to pass over with little more than a bare allusion the work of churches and societies that are more openly and systematically aggressive on the domain of heathenism. The Wesleyan Methodists in England have always been honorably distinguished for their readiness to carry the Gospel to any class of men for whose souls no man was caring, and that even under the most unfavorable circumstances. It can never be forgotten who preached first to the Kingston colliers, and it will always be an honorable chapter in Methodist history that Methodist preachers did not shrink from preaching the Gospel at fairs and races, and other scenes, where obloquy and insult were their immediate reward. The "Open Air Mission" has for many years been carrying on similar work, under a committee of laymen of various denominations. Its special business is the visitation of out-of-door gatherings which take place at races, fairs, wakes, feasts, camps, regattas, reviews, fêtes, etc. The society occupies besides, in London alone, upwards of a hundred fixed stations for preaching at stated times. Then there is in London the Society for Special Service in Theatres, Music Halls, Concert Rooms, and the like. When this movement began some twenty years ago, it promised the most wonderful results. It had a remarkable effect in bringing within

reach of the Gospel thousands of persons who could not be reached in any other manner. The charm of novelty no longer marks the movement, but it is still carried on with considerable vigor. In Scotland the "Evangelistic Association" sends its agents wherever suitable openings are to be found, whether in the shape of fairs or other gatherings in the open air, or in the existence of a spirit of religious interest craving special services for the preaching of the Gospel.

We must crave the attention of our readers at somewhat greater length to the efforts of a society which aims at promoting the work of evangelization by a method quite different from the rest. We refer to the Colportage movement as carried on under the auspices of the Tract and Book Society of Scotland. We the more readily introduce this subject in an American journal because it was from America that the idea of such a movement was derived. The present writer had occasion to remark, in an article entitled "The Colporteur in Scotland," contributed about a dozen years ago to the *Sunday Magazine*: "Before there was a single colporteur in Scotland, upwards of seven hundred were traversing the wide boundaries of the United States. A casual visit to this country of Mr. Cook, the Secretary to the American Tract Society, was the means of acquainting a number of Christian friends with the nature of the plan, and the great good it was doing in every State of the Union. These gentlemen were at the time full of anxiety in consequence of the reports they were hearing from city missionaries and other visitors of the poor of the vast circulation of publications either positively pernicious or at least frivolous and dissipating. The taste for solid reading seemed to be dying out, and the rising generation appeared to have no appetite except for the spiced and exciting stories of the cheap London journals. Occasionally an old woman might be found reading Boston's *Fourfold Estate* for the thirtieth time, or a patriarch of eighty to whom Matthew Henry was as fresh and welcome as the first day when he set eyes on his *Commentary*. But these were exceptions few and far between. The younger portion of the community had no fancy for the well-thumbed and yellow-stained books of their fathers: something fresh, stimulating, and amusing was indispensable. In many cases the frivolous publications we have

referred to were becoming the usual companions of Sundays as well as week-days ; the necessary fruit of this being a sad and rapid deterioration of character."

While the immediate object of the Scottish Colportage movement was to supplant frivolous or pernicious literature by means of Christian and wholesome publications, it was most explicitly provided that the spiritual good of the people should be the great ultimate aim. It was not a mere book-hawking movement, and therefore not a rival to the bookseller ; but an evangelistic undertaking, seeking the conversion of sinners and the building up of the kingdom of Christ. The agents sought are men of earnest piety and evangelistic spirit, who are expected to take every available opportunity to do spiritual good, chiefly by making known the character and contents of the books which they sell, and occasionally by visiting sick and dying persons, or holding meetings in barns, kitchens, and bothies with such of the people as may be induced to attend them. Beginning with three colporteurs, the society has now two hundred and forty-three, traversing the greater part of Scotland, especially the rural districts, while a few have their field in the North of England and in other districts there. The amount of Christian good done by these colporteurs may be inferred in some degree from the number and the quality of the books which they sell. Of some books, such as McCheyne's *Life* or Bonar's "*Way of Peace*," a very large number is sold. The best periodicals, whether for Sunday or week-day reading, are also disposed of in large numbers. There is ample evidence that in many districts a very decided improvement has taken place in the reading of the people. The importance of this change it is hardly possible to overrate. There is also ample evidence of the spiritual good done by the colporteur, especially among those who are all but inaccessible to the Christian minister. The wages paid to the men are very moderate, so that there is no temptation to them to rush unadvisedly into the work. Their salaries are defrayed by the society, partly from profits on their sales, and partly from a guarantee fund, usually contributed by friends in the locality where the colporteur works, who have thus a special interest in him, and a special reason for observing the manner in which his work is done.

Although colportage has not been introduced in England as an evangelizing agency in any such degree as in Scotland, it has obtained the warm approval of Mr. Spurgeon, and through his personal exertions it is carried on to a considerable extent.<sup>1</sup> In Ireland it has been very successful, both among Protestants and the members of the Church of Rome. In fact, in many districts it furnishes almost the only method by which access can be found for the Gospel to the Roman Catholic population. The Reports of the Irish Colportage Society furnish many interesting instances of conversion through the reading of the Bibles or other books supplied by the colporteur, or through his conversations and prayers.<sup>2</sup>

Having thus surveyed the principal evangelistic methods pursued chiefly though not exclusively in Scotland, first by churches, and next by societies of a catholic character, it might not be inappropriate now to glance at the operations for which certain zealous *individuals* have made themselves responsible, some of which have attained to considerable magnitude and importance. We refer to such undertakings as that of Mr. George Holland, of London, and other gentlemen; or that of Miss Macpherson, in connection with the emigration of destitute children to Canada; or of Mrs. Meredith, for the reclamation and conversion of discharged female prisoners. Into the details of such undertakings, however, we will not enter. The "Free Lance" is a very useful soldier so long as he works in harmony with the general sentiment and common-sense of the Christian community. Some people are so constituted that by themselves they work admirably, but in harness with others they are neither comfortable nor comforting. It is well that there should be sea-room for Free Lances, and for the most part their work has been admirably done. But they can hardly be taken into account as contributing in any considerable degree to the evangelization of the whole community. Nor would it be wise to

<sup>1</sup> The Religious Tract Society of London helps greatly in the circulation of sound Christian literature, but is not like the Scotch Society, evangelistic in its constitution.

<sup>2</sup> The writer may refer to three tracts written by himself—"The Colporteur in Scotland," "Footsteps of the Colporteur," and the "Colporteur in Ireland."

encourage indefinitely this form of philanthropy. Interesting as an exception, it would be undesirable as a rule. Home-evangelization is undoubtedly, in the first instance, the duty of the Christian Church in its church capacity. Our church divisions unfortunately prevent the full accomplishment of many evangelistic projects in this way, and, as a partial remedy, societies have to be organized. So long as these societies are indirectly controlled by the general sentiment and feeling of the Christian Church, trust may be placed in them as useful agencies, enjoying the blessing of God. The same thing is true of individuals ; only individuals are not so dependent on the good-will of the church catholic, and are more liable to be guided by crotchets or individual impulses. We may welcome the labors of all good men working by themselves, without having any special favor for that form of Christian activity.

Hitherto, in this paper, we have viewed the subject of evangelization by itself ; but it is impossible to dismiss it without glancing at its relations to some kindred subjects with which, in practice, it is inseparably connected. Home-heathenism stands in vital connection with many forms of social evils, partly as cause, and partly as effect. On the one hand, heathenism is caused and aggravated by the prevalent arrangements for the sale of strong drink, and by the drinking customs of society ; by crowded dwellings, want of ventilation and the means of cleanliness ; by needless hindrances to marriage, or by neglect of right family arrangements, as when the mothers of young children work in factories, letting out their children to others to tend ; by want of training in domestic economy, whereby the house-wife often enters on the charge of a home without knowing how to make it comfortable ; and generally by habits of thriftlessness, untidiness, and want of foresight. Wherever such evils have established themselves, they are found to constitute most serious obstacles towards the evangelization of the people. A purely spiritual force like that of the gospel may indeed prevail over them all, and in many individual instances it does so prevail ; but the tendency of them, the terrible, deadly tendency of them, is to obstruct the work of the Gospel. Those who are deeply concerned for the regeneration of the lapsed classes cannot but seek to assail these social evils, or to have them

lessened by means of the weapons which the civil authorities are able to wield against them ; and yet, even in doing so, they cannot but feel that without the grace of God these evils, once established, cannot be effectually rooted out. It becomes necessary to combine both methods of cure—to do the utmost to diminish, by public measures, arrangements so pernicious to Christian life ; and to do the utmost, at the same time, to foster an earnest Christian life as the best means of lessening the evils. If the two methods could be carried on simultaneously, by the civil and spiritual powers respectively, there would be some hope of reaching the desired goal—a hope that can hardly be cherished reasonably if either the one or the other fail to do their part.

Of all hindrances to evangelization in Scotland—and probably the same is true of many other countries—the most terrible is that presented by the traffic in strong drink. The enormous extent to which the national revenue is derived from the sale of drink gives the government of the country an interest in providing facilities for its consumption—*semper, ubique, et ab omnibus*. Local authorities seem to take the cue from those of the nation, so that there is an almost irresistible tendency to the multiplication of places for the sale of liquor. Indeed, with the exception of certain rural districts owned by landlords, who recognize the mischief wrought by too great facilities for obtaining liquor, there is hardly a street, ward, or parish where drink-shops are not like the stars of heaven for multitude. And in those very districts of our large towns where the population is most drunken, and the necessity for evangelistic efforts is greatest, these drink-shops are the most numerous. There is something actually pathetic in the fact that, by the arrangements of the authorities, where virtue is frailest the snares for its destruction are most thickly set ; where people have most need to pray, and in some touching instances do actually pray, “ Lead us not into temptation,” the guardians of the public safety take care that at every street-corner, and almost at every second door, the temptation from which they have need to be delivered shall present itself in its most enticing form. The transparent fallacies by which this is often justified are discreditable alike to the heads and hearts of those who use them. They argue that if

people have the desire of drink, it is all the same whether it is to be got within ten yards of their door or twenty, in one house or in ten. Whereas to many it is the perpetual sight of drink that kindles the desire for it, while the number of drink-shops and of drink-sellers creates a keen competition for customers, and gives to the keepers of them only too obvious and too strong an interest in inducing as many men, women, and children as possible to drink as much as they can possibly pay for. "I could resist five public-houses on the way to my house," said a man lately who knew the snare; "but I cannot resist twenty." Yet it is but slowly that the authorities are coming even to see the fearful hindrance to all good, temporal, spiritual, and eternal, which these numberless drink-shops constitute. It is a remarkable fact that nowhere are more zealous advocates of the temperance reform to be found than among ministers and others who have been called to labor among the fallen classes. At every point Drink meets them as their deadliest foe. If some poor drunkard's conscience has been touched, and he begins to think of his soul, it is felt that his only chance is to become a total abstainer, and in the presence of such numberless temptations even this is often with difficulty secured. His spiritual friends and advisers find it necessary to hedge him round with every available encouragement and help, foremost among which is their own personal example. They have far too much to do in inducing reclaimed drinkers to give the widest possible berth to their deadly foe to admit of their regaling themselves even moderately from the bottle. Christian hearts that are constantly in contact with drunkenness, and trying to cure it, come sooner or later to feel that there is nothing for them personally but to abstain. We believe there is hardly a laborer of any kind among the sunken, whether minister, elder, Sunday-school teacher, city missionary, or Bible-woman, who does not feel that if any good influence is to be exercised, abstinence must be practised. Alas! it is but a small minority that come to know in this way what evil the drink-traffic is causing; and hence the painful fact that even the Permissive Bill of Sir Wilfrid Lawson has so small a measure of support in the House of Commons.

The state of the dwellings of the poor is the next greatest hindrance socially to the work of evangelization. When Charles

Kingsley wrote "Alton Locke," he found a great amount of material provided to his hand in the papers on "London Labor and the Poor," which one of the daily newspapers had just given to the world, and nothing was there portrayed in darker colors than the state of their dwellings. Since that time much has been done to improve the dwellings of the poor; and we have again to record, with great regard, the kind and liberal service of an American gentleman, the late Mr. Peabody, who, besides furnishing the means for the erection of a large number of suitable dwellings in London, gave an impulse to the cause, and stimulated the energies of other friends in a manner which greatly enhanced the value of his personal contribution. Here again, however, we have an evil which acts alike as cause and effect, in connection with the degraded condition of many of the working classes. In remedying the evil of bad houses, physical and moral causes must be joined. The very best houses that could be provided would not of themselves cure the dissipated, reckless habits of many a workman's family. Even for inspiring men with self-respect, and much more for inspiring them with the self-control and self-reliance needed for an exemplary life, you must borrow the power of the Gospel. It may be paradoxical, but it is true—you need better houses to improve the people; but you need better people, too, to improve the houses.

We have but touched the fringe of a great subject in this fragmentary reference to the way in which, on the one hand, certain material and moral influences combine to degrade men, and in which, on the other, influences of both kinds must be combined in order thoroughly to reclaim and elevate them. Human nature is a composite affair; its various parts act and react on each other; nor can you look for the thorough restoration of any one part without at the same time taking steps for the restoration of all. The way in which the various interests and influences that affect man's welfare interlace with each other makes the work of social regeneration somewhat delicate. There are cases in which it is the wisdom of the evangelist to confine himself rigidly to the simple work of evangelization, and leave the affiliated departments untouched. This, for the most part, was the course followed by our Lord and his apostles. The relations of the church to the civil authorities were so delicate in those days,

and the risk to the church of seeming to trespass in the civil field would have been so great, that the early laborers contented themselves with preaching Christ's name simply as that of a Saviour from sin. Paul, indeed, hinted to Timothy that godliness was profitable for all things, having promise of the life that now is and of that which is to come. But this was only a hint that could alarm no one. The early preachers directed their whole energies to spiritual results. They let alone the social evils of their time. The vicious public amusements of the day, the injustice and cruelty practised on the slave, even the atrocious perversion of all justice practised by a Nero, failed to draw forth their anathemas. Their one object was to introduce into the body the spirit of life in Christ Jesus. They knew that once that spirit was at work, it would tell upon the festering mass of social corruption, and compel reformation there. This course was manifestly the result of Christian wisdom, arising from the inexpediency of arousing prejudices against the Gospel before its true character was established, before it had gained for itself a *δος πνον στρω*, a fulcrum for moving the world.

Now, however, that Christianity is the accepted religion of so many countries, and the recognized force for moulding their whole moral, spiritual, and social economies, we need be under no such ceremony either in bringing its influence to bear on the social corruptions of our time, or in calling for the removal of these corruptions as serious hindrances to the prosperity of Christianity. We are free to proclaim the truth far and wide, that the nature and life of man is such a complex affair that for his thorough welfare we need a harmony of forces—physical, intellectual, moral, social, and spiritual. It is true that the spiritual force is the strongest of all, and is capable by God's help of prevailing even when the other forces are neutral or antagonistic. But whoever really has at heart the true welfare of society must not look merely to the particular force with which he has officially to do, but to all the forces together. The magistrate cannot say to the minister, "I have no need of thee," nor the schoolmaster to the sanitary reformer, "I have no need of thee." All have need of all; but very specially the other forces have need of religion, and religion has need of the other

forces. It will be a happy day when all combine and conspire harmoniously for the true regeneration of the world.

Yet, while cordially inviting the co-operation of all, we must ever bear in mind that of all agencies for the regeneration of society, the spiritual force, the force of the Gospel of salvation, is by far the strongest. In the first place, it is when we look at man in the light of the Gospel that we realize his greatness, and feel how worthy he is of our best efforts to raise him up. An immortal being, a fallen being, a being who has lost God's image but may yet recover it, susceptible himself of endless suffering or bliss, and exercising a daily influence on all around him either for weal or woe—how terrible is his ruin, how glorious his recovery! As Pascal used to say, man is a mystery—a compound of greatness and littleness. Generally it is his littleness that is most apparent; and when that view of him fills the eye, there is little effort to save him, and little concern for his wrecked life: he may be sent into the wars as food for gunpowder, or sent to sea in a crazy ship, and if he is drowned, what matters it—the ship was insured. But in the light of the Gospel, it is the greatness of man that fills the view—his immortal capacity, his never-ceasing influence on others, his fitness to become a servant of God, useful in his work—nay, a son of God, rejoicing in his fellowship and restored to his image. What an unprecedented impulse does this view of man give to those who labor for his regeneration! Again, it is only when the Gospel is brought to bear on man that he himself is thoroughly roused to a due sense of his position as an immortal being, and to any measure of hope that his regeneration can be effected. Show a man that the Son of God died for him, the just for the unjust, to bring him unto God; that God desires him for a son, and has ready for him an inheritance of exceeding great worth—where he himself dwells in glory; show him that the Holy Ghost, himself God, is in his soul, to fashion it in purity and beauty like that of a Son of God, and that to resist the impulses that move him upwards is to resist the work of God himself; let him feel that the grace of the Gospel brings peace of conscience, a hope full of immortality, fellowship with God, in short, every blessing that God can confer—what an unrivalled force is thus furnished for his elevation—a

force equal, through God's blessing, to the very highest results !

After all, let the duty of others be what it may, it is the Christian Church, in its various branches, that must charge itself with the chief responsibility of reconquering the lapsed classes. It is the church that is in possession of far the most powerful artillery, if only she is willing and knows how to use it. The work is so important and so difficult that, to accomplish it, the church would need to summon her utmost energies and resources. In this paper, under the designation of lapsed classes we have had chiefly in view those who lie at the bottom of the social scale, the detritus of society in every sense. But we cannot forget that since the days of Dr. Chalmers the "lapsed classes" have been swollen by other elements, and that we have now to embrace under it an array of cultivated unbelievers who are as far removed from Christ as any. The problem becomes more and more difficult as time wears on. All the more is it necessary that the Christian Church should look it full in the face. It is the function of the church to conquer all these classes to Christ, and all divine encouragement awaits her efforts if only she will face the enterprise in faith and courage. On the other hand, if she shirk it, shutting herself up in a more comfortable and apparently desirable region, she cannot expect to prosper. She may content herself with drawing adherents from the more willing and well-to-do classes, and with building up congregations on whose comfortable condition the eye may rest with complacency. But this will not be following the footsteps of her Lord. Like the Son of Man, she must go forth to seek and to save that which is lost. Her true glory does not lie in any measure or kind of worldly prosperity, but in the degree in which she draws the lost to Christ and assimilates them to him. There is something radically wrong when, confronted with men perishing for lack of knowledge, the church passes by on the other side, thinking neither of the loss to the individual, nor to the church, nor to the world, nor to God, when even one soul is lost, much more souls without number ! Happy, on the other hand, the church that maintains its affections warm and tender towards the erring, and understands the joy there is in heaven over one sinner that repenteth ! It is this evangelistic

spirit that brings us closest to the very heart and soul of our Lord. It gives us wonderfully close fellowship with him in his moods of exceeding tenderness, as when he beheld the city and wept over it. And it gives us not less close fellowship with him in his moods of triumphant joy when he sees of the travail of his soul and is satisfied, forgetting all his sorrow, like the woman in travail, who forgets all her anguish for joy that a man is born into the world.

WILLIAM G. BLAIKIE.

## KANT, AND HIS FORTUNES IN ENGLAND.

IT is now a century since the philosophy of Kant was born into the world, suddenly, we might almost say secretly, the ungainly and repulsive offspring of a solitary thinker, adorned by no graces of style, recommended by no famous name. Men of our day may indeed wonder how it ever excited the interest of the philosophic world, for a book of such form as Kant's great Critick would now hardly find a publisher, still less a public, to adopt it. But we must remember that in the eighteenth century style was unknown in German philosophy ; there was hardly a model existing, save in the mystic dawning of Jacob Boehme, or the tedious and barren clearness of Christian Wolff. He that read philosophy in those days, beyond the range of French and English literature, was well accustomed to dryness of matter and mustiness of taste. Kant's style was no worse than the style of his contemporaries, and therefore brought upon him no special neglect. On the other hand, his matter was so new and startling, that it could not fail to attract an age throbbing with political and religious excitement, and casting aside the old and the traditional in the restlessness of its fever. In fact, the age which gave birth to so revolutionary a system created an audience to receive it with respect, and in a very few years German thought had started upon a new career. No single philosopher, except perhaps Descartes —we cannot yet judge of Darwin—ever drew so clear a boundary across the flowing continuity of human thought ; he stood, a second Aaron, between the living and the dead, and the plague of dogmatism, which had long benumbed intelligence and para-

lyzed thought, was suddenly stayed. The plague returned again, no doubt—an endemic malady in Germany, like the fevers of certain cities; but how new and suggestive the dogmatism of Schelling and of Hegel, how well reasoned and specious the dogmatism of Pessimists and Darwinists, how altered the whole tone of European speculation!

Even more remarkable is the periodical recovery of the Germans from their attacks of dogmatism, and their return to the sound attitude and critical caution of Kant. Fichte, Schelling, Hegel, have all waxed and waned: the former two, perhaps, swallowed up by the comprehensiveness and logical majesty of the last; but now even his day is gone by in Germany, and for one man who follows or reads or refutes Hegel, there are an hundred who follow and read and refute Kant. The nation has grown hot again over his interpretation, rival schools claim the ægis of his authority; and of late the Darwinists, the great apostles of Positivism, and the deadly enemies of metaphysic, have declared that he alone of the philosophers is worthy of study, and to him alone was vouchsafed a foreglimpse of the dawn of true science.

The common herd, indeed, of vulgar sciolists in the study of nature are still disposed to class him with the rest of pure philosophers, and deride him as an *à priori* theorist; but the deeper thinkers of the movement seem to have arrived at the truth which he long since inculcated, that the question for every thinker in every science was no question between metaphysic and no metaphysic, but between good metaphysic and bad metaphysic. Every human being that thinks enough to theorize must be a metaphysician of some sort, and the more ignorant, the more dogmatic; because such people argue upon theories which they have never stated to themselves, and assume results as attained which have defied the pursuit of centuries of learning.

Thus the old lady who maintains the sudden and instantaneous action of the Holy Spirit in conversion will tell us that there must be a moment—an *indivisible* point of time—before which the soul was in a state of condemnation, and after in a state of grace; and upon this ground we have the doctrine of gradual salvation rejected as absurd. Here is a theological argument

based on a thoroughly metaphysical assumption—on the denial of the infinite divisibility of time ; for it implies the doctrine that *time*, which is continuous, and therefore necessarily divisible, is made up of moments which are not divisible, and therefore of moments which are themselves not time. Is not this a most subtle question of metaphysic, and yet it underlies the theological beliefs of our least philosophical people ? If such a theory of time be indeed necessary to sound religion, we may well exclaim that it has been hidden from the wise and prudent and revealed unto babes !

This may serve as an example from the thinking of ordinary people ; it hardly requires illustration to show that the starting-point of every science, which is not a mere science of description, is a metaphysical starting-point, and that those very speculators who most deride metaphysic are compelled to employ it at the outset of their systems. The nature of Being and of Becoming, to use ancient phrases, is after all still the great question among scientific men ; and there are few who are satisfied with a mere analysis of the ordinary facts of experience, without probing below the surface, and speculating on the real nature of space, the elements of matter, and the origin of life.

From this point of view we may describe metaphysic as the inquiry into the assumptions or pre-existing conditions of the sciences, as well as into the origin of the phenomena of experience. Neither nature, nor science, which is our thinking about nature, originates at random and without laws. What are these laws and these conditions ? This is the form in which the scope of metaphysic has been described ever since Kant's time, and it marks the strongest contrast between our new philosophy and that of earlier centuries. Up to the eighteenth century, metaphysic had been allied with theology ; the two sciences had been mixed together and confused, so that even the genius of Descartes, who was the first great *lay* speculator, could not break the fetters, and kept perpetually reverting to a theological basis in speculation.

The attitude of Kant was completely changed. Though himself a profoundly religious man, he lays it before him as his guiding principle that metaphysic must be reconciled, not with theology, but with science. He never considers whether his system

can harmonize with the dogmas of his church, for his whole attention is fixed on this question : Can metaphysic be brought into agreement with the necessary conditions of the exact sciences—of mathematics, pure and applied? If it can, it is a true and real science ; if it cannot, the positive sciences must remain, and metaphysic, or what has been called metaphysic, must be cast to the winds. This is in fact the result of his great book, that there are portions of metaphysic—speculations on the nature of space and time, and of the forms under which we obtain experience—which are consistent with science, nay, even necessary to explain science, and these are accordingly established. There are other portions of metaphysic which are inconsistent with these tests, and which are accordingly to be rejected. I need hardly remind the reader that these latter are precisely the theological aspects of metaphysic—the spirituality of the soul, the necessary existence of the Deity, the freedom of the will : on all these the demonstrations of theological metaphysic are exposed and refuted.

The real reason of the permanent vitality of Kant's system, of its rapid conquest of the philosophic world, of its revival in an age of anti-speculative tendencies, is this strictly scientific spirit. He claims for it, indeed, no higher place than that of the police in an organized society, which is intended to leave peaceable and orderly citizens alone, and to interfere only in the interests of peace and order. But in speculation the disorderly are so numerous, their assumptions are so bold, their oppression so unjust, that the duties of metaphysic as the police of thought are constant and arduous ; and it may safely be said that no man can start with security in the pursuit of any science, or expect to attain in it real eminence, who has not the avenues of his mind guarded and his freedom of thinking assured by a preparatory study of the critical philosophy. This is the negative aspect of the question ; from a positive point of view it may be urged that, apart from the actual knowledge attained by the acute analysis and large insight of such a thinker as Kant, the mastering of his system implies a mental gymnastic superior to that which can be obtained even from the study of higher mathematics. The minuteness of detail in the Critick is not more remarkable than the extraordinary regularity of classification, by which every ques-

tion and every fact finds its fixed place in the structure. So it comes that we cannot possibly master *thoroughly* one part of Kant's philosophy without obtaining the clue to all the rest. The proofs of the validity and of the scientific character of mathematics and physics in themselves imply the refutation of ontology and of its pretended demonstrations.

If these remarks be well founded, it must be of great importance to the philosophic temper of our own as well as of former generations, to keep rethinking in our own way, and reclothing in our own words, the main ideas of the great Critic. Perhaps, too, it may afford a welcome clue to the student who finds himself lost in the thorny maze of the great discoverer's own exposition, which is too big with thoughts, and perhaps too self-surprised, to study elegance of form, and to avoid either ellipsis of thought or redundancy of expression. There are, moreover, many controversies prominent enough for the moment to excite the attention and divert the path of even great discoverers. These questions, which made perhaps most noise in their day, are now silent, or only live in the allusions of more lasting replies, and there is no need that in endeavoring to gather the wheat of a bygone generation we should gather the chaff also. The speculations concerning the proposition, *Quodlibet ens est unum, verum, bonum*, or the arguments of Moses Mendelssohn on the permanence of the soul, are now mere disturbances in the course of Kant's exposition, and may be passed over in silence. More important, perhaps, as the illusion is not yet dead, is his refutation of the conditions assumed in Swedenborg's visionary system, and it is to be regretted that his best-known and greatest work does not contain his official discussion of this pseudo-philosophy. But, in any case, our present limits will permit no deviation, however interesting, into by-ways, and we will grasp broad principles as simply as we may.

If we desire to ascertain what can be learned by studying metaphysic, we must go back to the most elementary conditions, and examine the very roots of the matter. For there appears to be something radically wrong about the science, as it has been heretofore studied. All through the best periods of Greek philosophy, all through the middle ages, metaphysic in the strictest sense—the science of Being, as opposed to the mere analysis

of phenomena—was regarded as the Queen of the Sciences. It is indeed striking, but not strange, that the anti-theological, sceptical unrestrained Greek thinkers, and the professed supporters of the Christian faith, should unite in placing this study above that of other sciences. But we cannot here turn aside to show that the one sought to attain theology through it, the other to establish theology by means of it. In every case the close kinship of both sciences is manifest, and though men may succeed in hiding it from themselves, it is hard to conceive a metaphysical age not theological, or a theological age not metaphysical. Of course I mean by *theology* systematic or reasoned-out religion. Hence we might have expected *à priori* what Kant notes in his Preface, that when theology went out of favor in the eighteenth century, when the sciences of observation and experiment began to fascinate the thinking world, metaphysic, once a queen and a despot, was left forsaken and neglected, to mourn the decay of her whilome greatness. Meanwhile pure mathematics, physical and natural sciences, which had begun modestly, and promised nothing, were advancing with giant strides, and showing now a promise of indefinite progress.

Can we say that metaphysic had a certain field or province to occupy, and that this was accomplished, so that the science might be rather regarded as wound up, than as a failure? Certainly not. We have a specimen of such a science in logic, which merely professes to analyze human reasoning. Now, although the term Logic may be used in wider senses, and extraneous variable matter may thus be imported into it, the strict province of the science was surveyed and occupied by Aristotle, and from his day to our own there has been no doubt or scepticism possible as to the main results once obtained. But in metaphysic we have no such fixed and undebateable ground. In every generation there rise up new inquirers, who refuse to accept any thing from their predecessors as established, and are even still groping about for a secure basis in a science which has been assiduously cultivated for ages. Surely there must be something radically wrong here. It is impossible, as has already been shown, to get rid of the incumbrance. The very sceptics who are most trenchant in their rejection of all existing metaphysic, are themselves metaphysicians, and carry on their attack by metaphysical

arguments. All men make, and must make, metaphysical assumptions. How is it that we cannot establish fixed laws, and a proper inventory of the metaphysical notions which we are obliged to employ?

Here is the problem which Kant raises. He proposes, like Descartes, to doubt every thing in metaphysic; but the very doubt presupposes a subject and object for doubt, and re-establishes at least so much certainty. There seems only one way of approaching the foundations of the question, and this is to inquire, quite generally, what knowledge is, and what right or possibility we have of establishing it. It may then appear that there is some unobserved distinction in the kinds of our knowledge, or in the basis of it, which justifies one science and discredits another.

All knowledge consists of judgments. We can conceive no other form in which knowledge can arise in the human mind, except that of asserting a predicate of a subject. The difference between random knowledge or probable knowledge, and what is called scientific knowledge or certainty, is simply this: Is the connection of the predicate with the subject necessary and universal, or is it merely accidental and occasional? A scientific truth, such as the truths of geometry, professes to be a necessary and universal combination of this kind. Of course the very first sceptical doubt suggests that there is no such certainty, that all such combinations are only comparatively universal, and that there is no such thing as an absolutely universal and necessary proposition. To this Kant replies that there is one part of our knowledge, or perhaps I should say a preliminary condition of knowledge, which consists in the power of making such propositions. In every complex idea we can logically separate one attribute, and affirm it of the rest, which cannot exist without it. We may assert absolutely, for example, that color is extended, because color without extension is absolutely inconceivable. Hence there is such a thing as an universal and necessary combination of a subject with a predicate.

But it is equally obvious that from such propositions no real science can be constructed, for they merely expound or analyze what we already know, and can never lead to what we do not know. We require for this purpose propositions with the cer-

tainty of these analytical truths, but with this additional feature that the predicate is *not* contained in the subject. If we look at the axioms with which the first book of Euclid opens, we shall see that there are such propositions. We find there such analytical propositions as I have just described, where the union of subject with predicate is necessary, but no new knowledge is or can be conveyed. These propositions are the conditions of all sorts of knowledge, and by no means confined to geometry, and are of the following kind : The whole is greater than its part ; whatever two quantities are equal to a common third are equal to one another. These are the preliminary conditions of all sciences, which cannot be violated, but which are the warning notices, not the guide-posts of knowledge. There are confused with these a very different kind of axioms, which, though they strike the mind as equally certain and universal, rest upon a totally different basis. That two right lines cannot enclose a space ; that lines which never meet must be parallel (or some equivalent statement)—these propositions have no meaning except in geometry ; they do not receive their certainty from the same universal conditions as the former, or logical axioms, but they are nevertheless as certainly true ; they are universal and necessary. But what is far more important, they are not mere analyses ; they are not, in fact, closer definitions of their subjects, but distinct assertions of predicates not contained in the subjects. Straightness in a line is not the same as shortness, nor is it originally implied by it ; and yet we can assert with absolute certainty that a straight line is the shortest between two points.

Here, then, is the real basis of knowledge, the real starting-point for science. This sort of proposition, while certain from the beginning, while requiring no more evidence than one distinct perception, is *synthetical* ; it adds to the subject ; it gives us information. Kant saw at once that here was the peculiar feature ; here was the true cause of the success of mathematics ; here must be the cause of the failure of metaphysic. His whole Critick is the investigation of the true catalogue of our synthetical and necessary judgments, and the determination of the limits of our knowledge thereby.

He found the basis for mathematical science easily, by one

brilliant discovery—that necessity was not imposed upon the mind from foreign sources, but by the mind from itself. I should have said *from within*, but that this very discovery completely revolutionizes our notions of within and without. The qualities of bodies had long since been divided into *primary*, which were necessary, and therefore belonging to the objects; and *secondary*, which were accidental, and therefore added by the perceiving subject. Now, so far as an individual subject perceives an object differently from his neighbor, this distinction is sound enough. But if every subject is obliged to perceive objects in one particular way, then this particular way of perceiving, this special feature, will be the most universal and necessary feature which any object can possibly possess. In other words, this subjective condition will become the most objective and primary of all qualities; it will above all others be asserted to exist in the object, which cannot be perceived without it, and its laws and determinations will form a science of the most certain and universal propositions.

This was the position which Kant assigned to our intuitions of space and time, which he showed to be *à priori*, necessary intuitions, without which nothing can be intuited, and which are therefore the *forms* of all our external and internal presentations. Hence it is that we assert universal truths about geometrical figures, or about numbers, which are modifications of these universal forms, which we can envisage by a single act of imagination, and assert to be absolutely binding on all our experience. If, then, *objective* means something apart from our perceptions, space and time are essentially subjective. But if *objective* means, as it ought to mean, that which is most certain and necessary in our experience, then nothing is or can be more strictly objective than these universal forms. And this is the Kantian sense of object, as opposed to noumenon, or *thing per se*, which can never be an object to us. The word *thing* he unfortunately uses for both, but much more frequently for phenomenal objects, and opposed to *thing per se*.

I will not dilate any further on this Kantian view of space and time, which has been the most easily understood, and generally received, part of his philosophy. In fact, so completely and satisfactorily does it account for all the phenomena to be

explained, that those who would not accept it as final have had resort to a very ridiculous argument, which, however, is worth refuting in a few words. Its main advocates were independently Sir William Hamilton in England and Trendelenburg in Germany. Granting, they say, all that Kant has established ; granting that space and time are forms of intuition, and that thus the synthetical *à priori* character of geometry and arithmetic is established : why may not space and time be also attributes of phenomena in the ordinary sense ; why may they not, vulgarly speaking, be both subjective and objective ? When Kant offered the alternative—either they are objective and imposed upon us, or subjective and imposed by us—he forgot the third possible and, we think, real state of the case—that they may be both.

As regards Hamilton, it seems ungracious to bring up against him another case of inconsistency, seeing that he has received such severe justice at the hands of the present generation in philosophy. His teaching may be called extinct, and it will be difficult, in the history of philosophy, to find a man more over-rated while he lived, and despised as soon as he was unable to defend his own opinions. But it does seem astonishing to hear such an argument from the man who set up the *Law of Parcimony*, not only as a law of philosophizing, which it is, but as a law of nature, which it need not be. Nature, he tells us in his Lectures, always acts by the simplest means. Not more, nor more onerous causes, he tells us in his Discussions, are to be assumed than will account for the phenomenon to be explained. If ever there could be a direct violation of the Law of Parcimony, it is, then, the assertion, that although Kant's theory gives a full and complete explanation of all the facts of the case, there is possibly another collateral cause, producing the same results !

This Law of Parcimony, therefore, which has additional force as an *argumentum ad hominem* against Hamilton, is valid against any philosopher who admits a theory as satisfactory, and yet suggests that the rival theory may also be true. It is not perhaps impossible, but it is quite inconceivable, on any rational view of things, that when Nature has produced certain results by establishing laws in the human mind, she should amuse her-

self copying these results among things *per se*, for no purpose or object that we could name ! This is the subterfuge of men who want to be thought advocates of new light, who cannot refuse to listen to the voice of reason, yet who desire to hug the old prejudices with which they are imbued. But it is vain to put the new wine into old bottles, or a patch of new cloth upon a faded and worn garment.

But there are two questions which might fairly be asked by the student as regards mathematical proofs, and which are indeed clearly answered by Kant, yet not in his official treatment of the *Æsthetic*, but in his *Methodology* ; and, moreover, the second of them is unfortunately obscured by the translation of Mr. Meiklejohn, so that the English reader has no chance of understanding it. The first is this : How can an individual figure and an individual demonstration be valid universally ? Euclid puts the matter on a wrong basis, or an unsatisfactory basis, when he invokes the principle of parity of reasoning, and tells you that if you try any other construction the proof will be found equally valid. Locke, on the other hand, when he spoke of the abstract idea of a triangle, which was right-angled, equiangular, scalene, etc., all or any at the same time, seemed to point to something which, if general, was radically inconsistent with a definite intuition in space. Kant was the first to solve the difficulty. In his chapter on the Discipline of Pure Reason, § 1 (p. 435, Ed. Meiklejohn), he shows that mathematic proceeds by the *construction of concepts*. Hence the individual figure, which is usually even an empirical figure on paper, merely serves to indicate the *act* of construction, not its particular modes. Thus, when we speak generally of a triangle, we mean the *act of putting together three lines* into that figure, and this act remains the same, whatever variation there may be in the sides and angles. Here is the secret of the universality of mathematical demonstration, though established by a singular case.

The next problem is solved a little further on in the same section, viz. : How are the demonstrations of algebra to be brought under the head of intuitions in space or time ? I will in reply freely translate the paragraph (p. 437) : “ Mathematic constructs not only *quanta*, as in geometry, but also mere *quantity*, as in algebraic notation, in which complete abstraction

is made from the nature of the object, which is to be thought under this sort of symbol. Accordingly algebra chooses a certain notation for the construction of all quantities regarded as numbers: I mean such signs as +, —, and,  $\sqrt{\phantom{x}}$ ; and when the quantities have been similarly denoted according to their relations (by  $x$ ,  $y$ , etc.), all processes by which quantity is produced or modified are set down in intuition according to certain general rules. For example, if one quantity is to be divided by another, they are set down in intuition, according to a fixed (though arbitrary) rule, as  $\frac{a}{b}$ . Thus algebra attains by a *symbolical* construction what geometry does by an *ostensible* one, to enlarge our knowledge by means of synthetical judgments."

But all this mathematical knowledge only concerns the forms and outward relations of things: it does not touch their inner qualities; it does not touch the joy and pain of the world, the colors, the texture, the design of nature. This larger and more complex study is the science of physic, in the widest sense—the sense in which the Greek philosophers took it, when they composed their many books,  $\pi\varepsilon\rho\lambda\tau\circ\eta\tau\circ\sigma$ , or  $\tau\circ\eta\mu\eta\circ\eta\tau\circ\sigma$ , and made these abstract terms synonymous with nature and with truth. Thus Hegel, who attempts to deduce the categories from one another without allowing differences of kind or of origin, makes quantity the mere neglect or abstraction from quality, coming later in the order of thought. We turn then to the science of qualities, and ask, if it be indeed true that all certainty come from within, that all science must consist of synthetical propositions, which are also *à priori*, how is it possible to have a *metaphysic*, or necessary and universal knowledge, of phenomena, which are *ex hypothesi* given empirically, given to us in and by means of our daily experience? In other words, how is *pure* physic possible? Granting that we have power to determine the mathematical relations of nature from within, because we impose space and time upon it from ourselves, how can we possibly determine *à priori* the qualities of nature in this barren mathematical frame? This is the question which Kant justly considers the most difficult ever put by any metaphysician to himself, and that which required years of his labor to obtain its solution.

Of course the difficulty of finding a basis for a meta-

physic, or certain knowledge, of phenomena is very great, when we start with the fixed principle that all such certainty must come from within, that it must be given *by* us, and not *to* us. For the phenomena of what we call nature are only given to us in experience, and whatever inductions we can make from particulars in experience may lead us to gradually attained and comparatively certain truths, but to no propositions like those of mathematics. And yet we have such a science as pure physic; we have certain and universal propositions wherewith we anticipate experience, and even rectify it when it seems to contradict them. Thus the axioms that action and reaction are equal, or that the quantity of matter in the world remains constant, are not at all obvious to our experience, and seem even at variance with it, but are nevertheless strictly scientific propositions, imposed upon every possible experience which we can have.

Here, then, is the difficulty which, as Kant tells us, he solved by the discovery that *knowledge of the empirical need not be empirical knowledge*; in other words, that *a priori* conditions and principles may be required not only in receiving from without, but also in systematizing, the impressions of experience. When this clue is once found, it is not difficult to see one's way in the prosecution of the inquiry. We have already found that our intuition produces a sort of unity, or possibility of unity, in phenomena by putting them into space and time. Whatever be the differences in external impressions, they all agree in one point, they occupy space; whatever the differences of internal, they occupy time.

But there is a still closer unity than that of all space and all time—intuitions which have no limit except the limits of perception. You ask me whether any particular combination in nature is possible, and I reply that *within the whole of my experience* I have not met it. Totality, as we know, is an unity embracing plurality. What sort of total, then, is this “whole of experience”? Is it not obvious that I bind up the myriad facts which have presented themselves to me, in the space and time of which I am conscious, as *my* mental facts. Do I not refer them to my single faculty of perception, so that the fact of *my* perceiving them all produces in them one great unity? This is what Kant calls the *synthetical unity of apperception*—synthetical of course,

for it binds together all sorts of perceptions ; apperception, to denote that it is the spontaneous action of the mind, not merely receiving the impression, but giving it a place and title in my experience. This large unity is of course the first condition of experience. Any mind which went on perceiving and reflecting without imposing this unity on all its impressions, could not attain to *experience*.

But we may at once add, that so wide and universal an unity must be practically useless, if there be not some further principles of union, some lesser laws of organization and discipline, which marshal the individual facts into companies, the companies into regiments, so that the whole army is an unit made up of lesser units in harmony with and in subordination to it. Are there such lesser principles of unity, and are they in harmony with the grand synthetical unity, the commander-in-chief, as it were, of the army of the facts of experience ? To this we reply, that as soon as we consider the act of thinking, of reflection, as contrasted with mere intuition, we find every one of its operations without exception may be described as the asserting or denying of unity among our impressions. We can create no new matter of experience by thinking upon our intuitions. But we can order and classify them ; we can assert that one comes under another, or not so ; in short, we can judge about them. All thinking, every act of the understanding, may be called a judgment. Every kind of judgment asserts unity. Here, then, is the clue to those lesser and subordinate officers, which marshal our impressions into the unity of experience.

I cannot pursue the inquiry into its intricate details. The received analysis of judgments in the long-established science of logic afforded Kant a list of what he called *Categories*—that is to say, frames of assertions, in which subject and predicate are synthetically combined, and nevertheless combined *à priori*. It must be observed that when he calls these categories *concepts*, it is in a sense widely different from those *representative* concepts in which we sum up our experience of particulars. These are a sort of outline sketches ; if very general, they are mere words which are symbols of such sketches. Thus my representative concept of a *horse* is a sort of vague image of a horse ; while my concept of a *democracy* is a mere symbol, which would require a

long process to transform it into a set of mental pictures. But these *assertive* concepts, if I may so call them, which Kant set up as his categories and legislators for experience, are *frames of assertions*, which determine *a priori* that when we make a judgment we must assert the subject to be one, or many, or many in one ; we must assert the predicate to belong to subject, or not so ; or to limit it, by excluding it : and so for the rest. Thus as soon as an impression is made upon our senses, we put it into a certain space and time ; but this is not enough to form an object. For we must not only have the impression : we must make a judgment as to what it is, and to what it belongs, and this judgment must be necessarily according to some one or more of the categories. Thus the categories make experience.

I pass by the schematism, in which Kant seeks to show that these categories, which are purely intellectual, are imitated in various time-determinations ; substance, for example, being imitated by permanence, cause by necessary sequence, and so for the rest. Enough has been said to make it plain that any science of nature, or pure physic, which can exist for human minds, must be a complex of necessary judgments about the facts of experience, and that these facts, nay, even that experience itself, is only possible as the result of those fixed principles of unity which the mind brings with it in and by every judgment. Hence it is that we can declare with perfect certainty : all substance is permanent, and its annihilation in nature impossible ; all events must have antecedent causes, and a first beginning in nature is impossible. These are no deductions from experience, but the necessary conditions of knowing applied to the things known.

The very same principles which establish a metaphysic of phenomena establish, however, that no metaphysic is possible beyond phenomena. All the principles which give certainty and objective value to our knowledge of experience are intended for that very purpose, and that purpose only. They have no meaning except when applied to experience, and if we endeavor to apply such a category as substance, which has to us no meaning except a permanent existence in time, to things which are not in time, it is idle to call it science, whereas it is really nonsense. Hence all the speculations upon the nature of the soul, apart from what appears in consciousness ; all the speculations

upon the nature of matter, beyond what is given to our senses by experiment and analysis ; all speculations upon the Deity, as cause of the phenomena in time, though Himself not in time—all these things may be theology ; they may be matters of Revelation or of Faith ; they are not, and cannot be, the subject of science. Thus metaphysic, in the sense of ontology, is abolished ; metaphysic, in the sense of empirical psychology, is degraded to a secondary branch of physic, and a very poor one, inasmuch as it rests upon *à posteriori* observation, and cannot be conducted by experiments, which extort satisfactory replies. The only true metaphysic is that which establishes the basis of positive and deductive sciences, which shows the necessary conditions for obtaining certain and universal principles as a basis for the enlarged knowledge of the phenomenal world and its laws.

Such being the clear and definite results of Kant's great Critick, it may well be asked how it was that it did not settle the question of metaphysic (in the sense of ontology), and put a stop forever to the vain speculations about the essence of mind and of matter, upon which former ages had wasted their ingenuity and their force ? To this the reply is twofold, and derived not only from the nature of the human mind, but from certain admissions in Kant's own system. In the first place, as Kant himself insisted, and as has been argued in the opening of this paper, the human mind will not and cannot be deprived of the habit of speculating—in fact, of metaphysic of some sort. It is the highest and clearest privilege of the race to speculate ; it is even the prerogative of its higher members to do so more than the rest, and it was and is at any time a certain prophecy, that there will be books on metaphysic, and that men will not accept any solution which debars them from this privilege.

But apart from this general law, there is a feature in Kant's system which I have kept back till now, and which was the special point from which all attempts to improve or replace his system have started. The faculty of reason, according to Kant, only unifies and brings into system the data given by the understanding. Again, the understanding, being a spontaneous faculty, combining and regulating the data of intuition, has no power of initiative ; it must receive its materials from our intuition. But our intuition is, according to Kant, *receptive* : it can-

not create its own objects, but must receive the impulse from something else. What gives the impulse? What is the hidden *x*, as Kant calls it, which affects our faculties with what is called the sense of *quality*, about which we can anticipate certain laws, such as that it must have a degree, and that it cannot be infinite, but which in itself comes to us *à posteriori*? How does his system account for this?

Now, in his first edition Kant had been so busily occupied in developing and establishing the *formal* side of phenomena, and the elements imposed by the mind, that he had hardly said a word as to the *material* side, and was generally assumed to be an absolute idealist, asserting the matter as well as the form of all our experience to be created from within. But when challenged he at once expressed himself strongly against this theory. He says in his *Prolegomena*, that it never even came into his head to doubt the existence of things apart from the mind; he says, in his second edition of the *Deduction of the Categories*, that he is obliged to assume an impulse or starting-point from some foreign cause, *outside* the mind, in the sense of being apart from it in kind, and not locally apart, or apart in space.

This is the intractable, incommensurable element in our knowledge, about which we can assert nothing, but which it is necessary to assume, if we will understand not only the limits but the want of limit in our experience. Thus we constantly assert liberty, in the sense of causation, not determined by any necessary antecedent in time. We assert that we, for example, as free causes, are not coerced by the apparent motives which are the antecedents of our actions. Here, then, Kant again finds that there is an element in the question which is only understood by admitting the possibility of things *per se*, and of things *per se* acting as causes. Of course the word *cause* is here used in a new sense, for time is a necessary ingredient in the ordinary sense. But we can find no other word to express the notion.

Here, then, there is admitted an element which could not but occupy the attention of curious speculation. Kant himself will have nothing to do with it. His thoroughly tame and scientific spirit addressed itself strictly to the plain and knowable side of our experience. But he was too large and thorough

a philosopher to pretend to have solved an impossible problem. There seems, then, to be a thing *per se* at the basis of matter, and also at the basis of mind ; but whether they be the same or different, whether they be the Deity or brute matter, all this it is impossible to decide, or even to discuss. For all the predicates we can attach are the predicates of experience, and these are excluded *ex hypothesi* from things *per se*. This was the point which admitted of further discussion, of further attempts at solution, of further metaphysic in the worst sense, though Kant's principles had made it plain how all such attempts must result. Here it was that Fichte, Schelling, Hegel, and Schopenhauer found the solution of Kant incomplete. So it was ; but is the incompleteness the result of our inevitable condition, or is it the result of mistakes in his solution ?

Perhaps the contrast between Kant and his German critics will be most simply explained if we dwell for a moment on the meaning and nature of a *limit* to our knowledge. It is admitted by all philosophers that our knowledge is in some respects limited. What is the nature of this limit ? By what or by whom is it imposed, and are we bound or are we compelled to inspect it ? What are the consequences if we attempt to overstep it ?

Kant's official answer to this question is found in the section on *Phenomena* and *Noumena* at the close of the Analytic—a section which was partly rewritten in the second edition, but in no wise altered as to its argument. He insists that the very assertion of our experience being phenomenal, or conditioned by the knowing faculties, suggests and implies the existence of things apart from these conditions, or of things by themselves, as distinguished from things as known to us. It is, therefore, natural and necessary that we should distinguish phenomena from something else, which in intuition we can call nothing but the thing *per se*, but in thought has been named the *noumenon*, or object of pure thought, as distinguished from the thing thought through the categories with the application of the schema and the other conditions of experience. Hence it is that these things *per se*, which, according to Kant, cannot possibly be *thought*, in any definite sense, are nevertheless called *νοούμενα*, because we fancy we can apply to them the pure categories, without any of the restrictions required for knowing objects in the proper sense.

In a negative sense, as the opposite of what we really know, and as the limit which our knowledge can never reach—in this sense Kant recognizes and admits noumena. But whether they really exist, in the only real sense in which we use existence, or what may be their properties or nature, on these questions all reply is precluded by the very conditions of the human mind. Kant himself was disposed to believe in this ultra-phenomenal world. He expressly asserts that it never came into his head to deny it. But he insists that any science of such things, such as ontology professes to be, is perfectly baseless and idle, for we can never make a single synthetical assertion with our pure categories,<sup>1</sup> and can do no more than twist and turn them about analytically.

Here is the point which was taken up by the later philosophers in Germany. Fichte insisted that to admit any *non ego* of this kind was absurd. He held that all these limits are merely limits set up by an unconscious action of the mind for its conscious action. The thing *per se* could be no separate existence from mind, but rather a self-imposed obstacle, which came to be mistaken for a distinct thing. Fichte, moreover, first started a theory as to the process of thinking, of which the forms were to be found in Kant, but which really owes to him its celebrity, as it was adopted from him and developed into a whole philosophy by Hegel. I mean the advancing from the thesis, or positing of an idea, to its antithesis or contrast, and then gathering together both into a synthesis. In the Hegelian form this process is now familiar to all students of philosophy. Perhaps it has not been sufficiently noticed that Kant assumes the principle in that part of the Critick in which he derives our idea of the *Ens realissimum* from the disjunctive syllogism. For he there shows that the contradictory predicates are necessarily regarded as making up together the sum total of the possible determina-

<sup>1</sup> It will be remembered that by *pure category* is meant the empty logical frame for a judgment, without the schema which imitates it in time, and thus makes it applicable to experience as a synthesis of impressions. Thus the pure category of substance is the notion of a subject which cannot be a predicate of any thing else. It is only when we add the schema that we have a *permanent subject in time*. This latter, the empirical use of the category, is of vast importance in pure physic. The mere formal frame is, on the contrary, barren and idle for any scientific purpose.

tions of the subject. Thus the contradictory opposites are not absolutely foreign to one another, but make up together a sphere of possibility within which they mark a line of distinction. But Kant only applies this principle to determine what he calls the *Prototypon Transcendentale* (Dialectic, iii., § 2). With Hegel it becomes the necessary movement of thought, through which it advances from category to category, according as the process is repeated with each resulting synthesis.

Were we merely to consider the philosophy of Hegel in the country which gave it birth, and in the language of which the ambiguities first made its existence possible, it were merely a question of the history of philosophy. For since the year 1848, when the politics which he advocated became abhorrent to young Germany, his philosophy suffered the same fate, and was driven out bag and baggage from the schools. But though the *πρόφασις* or *αιτίαφανέρα*, as Thucydides would say, was his advocacy of the petty despotism of the wretched crew of German princes, the real cause of the fall of Hegel in Germany was his retrograde and anti-scientific tendency.

All the conditions laid down by Kant as necessary to explain the progress of positive and the futility of ontological science were abandoned or denied by Hegel. He went back to the old notion, that the data of sense were the same in kind, but not so clear, as the products of thought. He reasserted the knowledge of the absolute, and affirmed the validity of the ontological argument for the Deity, viz., that from the mental existence of an all-perfect Being we could proceed to affirm his existence. Indeed, the mental existence of an idea is in the strictest sense its real existence, according to Hegel. Moreover, he undertook to express opinions about the methods of science which he did not understand, and to criticise the work of scientific men whom he failed to appreciate. These are the large faults which were certain to overthrow his system among a nation of earnest and patient thinkers, and its collapse in Germany is a very strong argument that when thoroughly tried it is found wanting. For though such an argument is merely an appeal to authority, it is the soundest and most legitimate appeal to the highest kind of authority—to the general consent to a large public of able and unprejudiced thinkers, who, as a body, can have no interest in

rejecting a system save its inconsistency with truth and with progress.

The really curious feature about the history of Hegelianism is its resuscitation in England in our own day, long after it had died out in Germany. The leading metaphysicians of England and Scotland, Professors Green and Caird, Messrs. Stirling and Wallace, are all Hegelians in tone and way of thinking, if not in profession; and such men are, of course, only to be met by argument, and not with the assertion that they are fighting over again a battle which has been fought and lost in Germany. But to do this is beyond the scope of an article, and beyond the powers, it may be, of the present writer, though he feels perfectly confident of the ultimate expulsion of Hegel from English philosophy also. It is impossible that a system which has been thoroughly tried and has failed in Germany on account of its extravagance should make its permanent home in England.

But it is rather the object of this paper to show that it requires a long time for a German system to become naturalized in England, and that if we apply the analogy of the history of Kantism in this country, we may infer that a good many years will have to elapse before Hegel will be really found out and laid aside among us. He is greatly aided at present by the strength and diffusion of a sensual school, which has the opposite faults, and whose errors such thinkers as Mr. Green and Mr. Stirling are perpetually exposing. The recoil from sensualism often throws men into absolutism. Yet even were these auxiliary causes removed, we may be sure that for a good many years any abstruse and complicated philosophy which comes from Germany will be at first completely misunderstood and ridiculed, then discovered imperfectly and piecemeal, praised for its weaknesses and censured for its strength, until it gradually becomes transported into the philosophic furniture of English studies. This process used to take place a generation or two after the popularity of a system in Germany. Probably with the diffusion of linguistic knowledge, and the increase of international communication, we may follow at a lesser interval hereafter.

We can most easily study the first effects produced in English philosophy by the spreading fame of Kant in the notices of Stewart's Dissertation (vol. i. of Hamilton's edition). The Ger-

man language was unknown to Stewart, and he was obliged to confine himself in his inquiry to Kant's earlier Latin essays, such as the tract *De mundi sensibilis atque intelligibilis forma et principiis*, and to certain French expositions and translations of German sketches, which were any thing but adequate. Yet we cannot doubt that had Stewart been handed an accurate English translation of the Critick, his ignorant and contemptuous criticism would not have been modified. It was the fashion of the day to write clearly and elegantly about psychology, but to get rid of all close thinking, and scientific method, from what was then called metaphysics. In fact, every thing really metaphysical was banished from metaphysics by the popular lecturers in Edinburgh. In reviewing the theories of past thinkers, the main objects with Stewart and his school were to magnify them if they were Scotch, and to decry them if they were unorthodox. Thus when a conflict between these paramount interests arose, as in the case of Hume, it is very amusing to notice the anxiety and distress with which Stewart endeavors to vindicate his greatness as a Scotchman, and repudiate his philosophy as heretical. But any one who is familiar with the works of that time will remember how much more frequently "*alarming conclusions*" are avoided than *false ones* refuted. Provided, in fact, that a theory could be shown *alarming*, it had been sufficiently answered.

Such an apology for thinking was not likely to be seriously applied to Kant. The categories, of which Stewart gives the list in an appendix to the volume, seemed to him a mere farrago of nonsense. But so far as he ventures to offer an opinion, he evidently classed Kant among the intellectualists, and thought that any grain of real value in his system must have been anticipated by such people as Cudworth, Price, and Clarke. Kant's peculiar position as an *à priori* sensualist, as an empirical intellectualist, was far beyond Stewart's horizon. Nevertheless, this contemptuous rejection of Kant in Scotland could not stop the progress of his principles through Europe; and though Brown did not venture to discuss them, he speaks at the opening of his thirty-second lecture of the enthusiastic following and the violent opposition which Kant had recently found in Germany, as proofs of the metaphysical ardor of the German nation.

There can be no doubt that the French, both from their prox-

imity and from their greater philosophical curiosity, attacked the outworks of Kantism long before they were approached in England. Cousin, whose first tentative and timid account of Kant was delivered in 1816, and who was then unable to read the original, cites three or four translated as well as independent commentaries which had appeared before 1805. But though he fully perceived the greatness of his claims, and though he attempted during several years (1816, 1817, 1820) to expound to his class the whole Critick, and follow it in detail, he seems to me to have been so anxious to refute it, and so convinced beforehand of its thoroughly sceptical tendencies, that he never honestly thought himself into the system. Though I am here following the fortunes of Kantism in England, it is strictly within my province to mention Cousin's labors. For not only was his official account translated into English and regarded, within our memory, as the proper exposition of Kant in English, but his literary fame and his friendly relations with British philosophy made his works known and respected among us in their own beautiful language. It is more than probable that most English philosophers of thirty years ago who ventured to speak about Kant derived their knowledge from Cousin's lectures. A more untrustworthy guide cannot well be imagined. For Cousin, writing with great talent and elegance, and showing a good deal of knowledge in detail, misleads the unwary student from fact into fiction, from exposition into criticism; so that, were we not far beyond his stage now, it would be not only profitable but amusing to expose a few of his fundamental blunders. But no one would now venture to approach Kant through Cousin, whose errors should not obscure his solid merits as a bold pioneer into an unknown and abstruse system.

Previous to this time, and contemporaneous with the early French attempts to which Cousin refers, there were some few obscure attempts to interpret the new philosophy in English, but so little effect did they produce, that the very names of their authors have been forgotten, and few students of philosophy have ever seen or handled their essays. There were translations of the sketches of Beck, of Willich, and of Nitsch, which are now very difficult to find, but which all appeared before the year 1801. Then, after a gap of twenty years, there were translations of the

Prolegomena and Logic by John Richardson in 1819, of each of which I have seen but one copy, though I suppose this rather argues oblivion of the book than actual rarity. These translations are indeed full of inaccuracies (what translations are not so?), but are still such as might lead an inquirer to feel out the truth, and find the real system behind the unintentional distortions of the English version. There was also an article in the "Encyclopædia Londinensis" in 1821, by Wirgman, who was considered an enthusiast about Kant; but the second edition of the work (called the "London Encyclopædia") substituted a hostile account for his article, which accordingly disappeared from circulation.

This was the very time of Sir William Hamilton's life when he began to turn his attention to German thought and to visit German libraries, though his biographer tells us that on neither of his journeys could he converse in the language, and it is not easy to know how far he ever was able to move easily through its literature. But his powerful mind was not likely to be balked by such obstacles, and whether he judged it rightly or not, he certainly studied the critical philosophy at the fountain-head, and was the main agent in producing a sober and real desire to understand it in Scotland. Thus we find the very date of his appointment to the chair of Logic in Edinburgh marks the revival of attempts to introduce Kant into England, which had ceased for about fifteen years. Influenced, I suppose, by Hamilton's teaching, or his personal friendship, Semple, in 1836, translated the "Metaphysic of Ethics," with a general account of Kant's system in his preface. There followed, in 1838, the first translation of the great Critick, published by Pickering, a fair analysis by the same hand in 1844, and in 1848 a second edition, revealing the translator's name, Haywood.

These books, accompanied by Hamilton's teaching, mark the third and successful attempt to have Kant's system considered by English thinkers. The first attempt—the shallow sketches of about 1800—were prompted by its sudden success in Germany, and at once crushed by the vapid and surface school, of which D. Stewart was the most prominent representative. The second movement, which was sporadic, and not in the hands of any professed leader, may have resulted from the

greater intercourse with the Continent after the peace of 1815, when it was found that, in spite of the contempt of the Scotch, such men as V. Cousin were discussing and explaining the system abroad. We must not forget, by the way, the vague and indirect but powerful influence of Coleridge, who was far more familiar than most people knew with German metaphysic, and who was indeed constantly, in after times, charged with appropriating ideas from this little suspected source. But all these preliminary attempts may be laid aside, as regards the real progress of Kantism in England.

The efforts of 1835-45 were more successful, followed by Mr. Meiklejohn's translation (Bohn's Library, 1853), which, however, loses whatever advantage it may have over Haywood's in accuracy, by the close and unpleasant type in which it is printed. Indeed, it is surprising how much a large and clear type, like Pickering's, facilitates the understanding of an abstruse book, and how much close and small printing, or double columns, interfere with the student. But, indeed, there are plenty of errors in Mr. Meiklejohn's version also, especially where he inserts a word or two to bring out what he conceives to be the meaning.<sup>1</sup>

I have already shown that Hamilton did not, however, fully grasp the sense of the Critick; and this may be said of all his school, which were once dominant in the country, and even through Europe, and of which Mansel was the leading writer at Oxford. A careful examination of all they have said upon Kant, whom they professed greatly to admire, and whose phraseology they freely adopted, will show that they had not advanced beyond the *Æsthetic*, and that the *Analytic* and *Dialectic* were almost a sealed book to them. Mansel clearly expounds and adopts Kant's view of the origin of mathematics, but his attempt to

<sup>1</sup> It is not fair to say this without giving instances. I therefore refer the reader to the following passages in this translation, which he can compare with the original, and in which he will find my censure justified: Page 84, end of note; p. 97, end of § 21; p. 103, in the Short View; p. 109, foot, where the sense is reversed; p. 113, translator's note; p. 117, last seven lines; and so on through the book. I will only note in addition the heading of § 4, p. 298, and pp. 333-40, probably the worst of all. But I know too well how difficult it is to keep these slips out of a translation, and do not intend by any means to underrate the service done by this version of the Critick.

reconstruct and simplify Kant's categories is a model of obscurity.<sup>1</sup> Nowhere do we find the least effort to expound the Deduction, nowhere an explanation of the Schematism.

Hamilton is perhaps not to be blamed for blundering about the *Refutation of Idealism*, and imagining that it was the reassertion of things *per se* in space, seeing that all the German critics down to and including Kuno Fischer have made that astonishing mistake; but it shows that he did not read the book for himself, or seek earnestly the solution for such an obvious absurdity as this passage appeared to him. Another colossal error shows, if possible, more decisively how little Hamilton knew about Kant. Nothing was more striking in the Critick than the double columns of *antinomies*, wherewith Kant showed the natural and unavoidable conflicts into which Reason fell, when it strove to think about the totality of phenomena, without the aid of the critical philosophy. Kant asserted that both sides were perfect demonstrations, and pledged himself that there was not a flaw in the arguments. But, having expounded them in order, he goes on to show how all problems started by the Reason must find their solutions in the Reason, and how, by applying the results of his analytic, it could be shown that the first two pairs of antinomies may both be false, or rather unmeaning beyond our perceptions, and how the other two pairs may both be true, if we admit something beyond our perceptions. Will it be believed that Hamilton persistently ignored these long and elaborate solutions—so persistently that one

<sup>1</sup> Cf. his *Metaphysics*, pp. 208, 224. Mansel is another instance, like Hamilton's, of an enormous, but ephemeral, reputation. He is never so much as once named among Oxford philosophers nowadays. And yet he did more than any one in his day to purify metaphysical terminology after the example of Kant. His system, an independent syncretism of Kant and Hamilton, has many ingenious and subtle observations embraced in its exposition, but his best book, the "Prolegomena Logica," is out of print, nor is there the smallest demand for its republication. The "Metaphysics," reprinted from the "Encyclopædia Britannica," is kept alive by the demand of Trinity College, Dublin, where we still use it as a convenient text-book for pass men. His Lecture on Kant endeavored in some forty pages to explain the critical philosophy, of course in a very superficial way, and is now quite valueless. Perhaps his strongest side is shown in his logical notes to Aldrich's *Rudimenta*, in which he parades all manner of mediæval dust and rubbish about Aristotle, thus imitating the encyclopædic pomp of Hamilton.

imagines he used a secondhand copy of Kant, in which these pages had fallen out ; and as persistently represents Kant as setting up the Reason against itself, and proving it engaged in perpetual, unavoidable, and *insoluble* contradictions ! Nay, worse, he actually laid hold of these blunders of dogmatic Reason, and set them up himself as an ultimate Law of Thought, in what he called his Law of the Conditional, which is nothing else than the first two pair of antinomies stripped of their critical solution ! What need is there of further evidence ?

So far as I know, the first impetus to a real and honest study of Kant's whole system, facing every difficulty, and shirking no detail, was given in a very curious and unexpected way. In the year 1862 a new examiner for fellowships in Trinity College, Dublin, Dr. Toleken, who had never published any thing, but was known among us as a deep and thorough thinker, set a paper in metaphysic which came like thunder out of a clear sky. We were asked, about the *synthesis of apprehension*, and the *productive imagination*, and the *schematism of the categories*, such questions as took away our breath, and sent us looking in vain through commentaries and pretended explanations for their answers. The first real light upon the darkness of Mr. Meiklejohn's version, which by itself was hardly comprehensible, came, to me at least, from the commentary of Kuno Fischer, which brought to its aid the first edition of the Critick, already drawn out of forgetfulness by Schopenhauer. This book, and an earnest study of the original, tested yearly by a new paper from Dr. Toleken, created in the University of Dublin a school of Kantians, who, whatever may be their faults or their want of originality, were at least so far original that they have taken the pains to master the system which they studied. The shortest and perhaps completest sketch from this school is Professor Monck's *Introduction*.

From this time on we find the writing on Kant assume a different complexion. I will say this much for the English Hegelians, that whatever their faults may be, or however they may choose to censure Kant, they have certainly insisted on understanding him. Such a book as Professor Caird's late work on Kant, though a misnomer, and more a refutation than a mere exposition of the Critick, shows the most thorough mastery of all its details. Thus, for example, the true view of the Refutation

of Idealism is adopted without one word being wasted on the interpretation received everywhere until it was exploded in Dublin. Thus again, to take the earliest Hegelian work in English, Mr. Stirling's "Secret of Hegel," we find in every page not only a thorough appreciation of Kant, but a bold insistence that he affords the only portal through which one can approach Hegel—a theory of which Mr. Caird's book shows another striking instance. Philosophy is young in Cambridge, and seems to have taken an ethical turn quite foreign to the tone of thought in Germany or in Dublin, so that there is not much evidence as to the progress of Kantism there. But we may be certain that such a scholar as Mr. Sidgwick would not set the problem which I saw proposed some years ago at the head of twelve questions on a three hours' paper for the moral science Tripos. It ran thus: "Give a short account of the system of Kant"!

On the whole, then, it may be affirmed that, within the last ten or twelve years, the great "Critick of the Pure Reason" has come to be fairly understood, at least by the younger generation of English metaphysicians. It is indeed remarkable that though the shorter "Critick of the Practical Reason" has been twice translated—recently and most accurately by Professor Abbott, of Dublin—we still are in want of the "Critick of the Judgment" in an English dress. It is earnestly to be hoped that Mr. Caird's second volume will embrace this most interesting and important branch of the Kantian system. We want, too, a more thorough dissemination of the understanding of Kant—a necessary condition at all event of understanding any thing serious which has since been attempted in philosophy.

I regret that my knowledge of American philosophy is too limited to permit me to form a broad judgment, or offer any large criticism on this point; but when the leading philosophic chairs are held by men of such undoubted insight and fame, it is fairly to be inferred that the youth of America, who turn their powers towards so speculative a pursuit, can hardly be in need of good guidance. Yet I confess I could not feel satisfied with the historical sketch given in the January number of this Review by the veteran teacher and writer who was once the ornament of a distinguished college in Ireland. There is no man living who has a better right to express an opinion about the future of

philosophy, and I will not therefore join issue with him concerning his exhortation to young America, that she may create a new school of metaphysic, and cut herself adrift from the great failures of former generations. I do not believe in any joint-stock company, not even so great and respectable as the great American nation, being able to construct a new metaphysical system. Such a discovery is always the result of a deep spiritual want in one, or in a very few, great thinkers ; and from the old Greek days down to the present the originator of a system has dwelt apart from the crowd, even of fellow-thinkers, and has devised his structure, not to meet a public demand for a philosophy, but to satisfy his own yearnings for truth and certainty.

But no doubt I am taking Dr. McCosh's words too precisely, and his remarks are intended to excite a mere general aspiration to independent thinking in America. If this is his intention, I crave pardon for adding to it the remark, that there is no surer way of becoming original than being well versed in the work of other men upon the same subject. To enter into Kant's process of thinking out his system is about the best possible way in which a man could learn how to think out a system for himself. I cannot see that Dr. McCosh's remarks upon Kant in the article before us are likely to stimulate that useful tendency. There are several statements in his "Criticism of the Critical Philosophy" (p. 209, *seqq.*) which almost force me to the conclusion that he has not turned his mind very seriously to its study.

Thus he says at the outset, "Kant assumes, or rather attempts to prove, in a very weak and wavering manner, the existence of the external world." What can such a statement mean nowadays ? Surely Dr. McCosh must by this time have learned the proper sense of the Refutation of Idealism in the Critick, and can hardly be still under the hallucination that Kant was then trying to prove things *per se* in space. But on any hypothesis what sense has the remark ? For Kant's book is more explicit than even Hamilton's works in asserting for our knowledge of phenomena in space a reality and a certainty at least equal to that of phenomena in time. It seems to me, therefore, as it would to any Kantian, that such a statement is in either case false. In one sense (and probably in Dr. Mc-

Cosh's) he never attempted to *prove* the existence of a world apart from us. In the other he proved, in no "weak or wavering" manner, that there was an external world, certainly known by certain and universal judgments.

Presently we come to similar pre-Kantian assertions : "The phenomenon cannot be called a thing. The subjective form cannot have objective validity." Now, it is impossible for us to know what a thing means, except it means some perception. When we speak of things *per se*, it is just like our speaking of a cause outside time ; we apply a word which has meaning within our experience to indicate a problematical *je-ne-sais-quoi* beyond it. I should like to hear Dr. McCosh's definition of a thing as contrasted with a phenomenon. When he adds that *subjective form cannot have objective validity*, he contradicts, without condescending to argue, the whole of Kant's *Deduction* of the Categories, which addressed itself to prove that the subjective forms of the understanding must have objective validity, and that no other objective validity is conceivable. If Kant is indeed to be refuted, he must be refuted with some better appreciation of the terms he has used and the attitude he has adopted.

But it is not hard to see through any ambiguities of language to the real point in which Dr. McCosh differs from Kant. He is offended at Kant's rejection of any pretended knowledge of the *Ding an sich*. He thinks human knowledge ought not to be confined to phenomenal objects, and that we are bound to follow out and discover the absolute nature of things apart from their manifestation and our faculties. This at first looks like absolutism, and we fancy we are going to meet another Hegelian ; for Hegel found the very same fault with Kant, and protested that the mind could grasp the absolute. But then Hegel made thought the one universal substance from which all things *per se* were derived. This is very far indeed from Dr. McCosh's view. We find on the very next page (p. 204) a doctrine set forth more like old Reid's than any thing else I have seen for a long time—that the mind, in external perception, perceives the thing itself with its qualities, among which is extension ; that there is nothing behind or additional to the *thing* in this sense ; and that our knowledge consists in comparing and

classifying our impressions about such things. Here we are on the one hand brought back to the Kantian view just rejected, and told in strictly Kantian style that we can know nothing but appearances; but, on the other hand, the safeguards of our science, which Kant found in *à priori* intuition, are cast away, and we are told that all our knowledge is empirical, and made up of generalizations from observation. Now we find ourselves in company with J. S. Mill and Bain, and must infer that mathematical truths are inductions, and that it is repeated observations which have taught us that two right lines will not enclose a space! Surely Dr. McCosh is not going to prove another Bain to mental philosophy? But I have never yet seen an attempt to refute Kant in a couple of pages, which did not show similar ambiguities and similar inconsistencies.

I will conclude this paper with a few words of prophecy to the young men of America who are going to devise the new system of philosophy for their country. I will undertake to say that whatever it may be, however original, or however carefully constructed by a syncretism of the truths of older systems, it must contain within it the very features for which the philosophy of Kant has been attacked from various sides. And all this has been expressly anticipated by Kant, if men would only take the trouble to read him carefully.

In the first place, then, to the vulgar, and to the metaphysicians who consort with the vulgar, all such systems, founded upon careful reflection and sifting of the evidences of our knowledge, must appear *sceptical*. For it is the very essence of philosophy to criticise the beliefs and prejudices of the vulgar, and tell them that a certain proportion of their supposed knowledge consists of false or unwarrantable inferences. It is equally certain that every member of the crowd will assert a right to criticise this attack on his beliefs; for, as Kant said, every one is a metaphysician of some sort, just as every Protestant assumes himself to be a theologian, and competent to discuss the mysteries of his faith. Hence every philosopher who ever had any insight into things, or appreciated the nature of evidence, must be attacked for this quality.

Take, for instance, the case of Bishop Berkeley. The good bishop never dreamt of denying any thing for which distinct evi-

dence could be adduced. He affirmed as stoutly as any one that he was ready to accept as existing all things to which any of our senses would testify. But because he would not accept an unknown somewhat ; because he would not admit a metaphysical invention, of great use to the Roman Catholic doctrine of Transubstantiation, but of none to any science or experience—because he would not admit this sort of substance, he was set down as a sceptic, and even ridiculed by the vulgar. For they insisted that he should accept not only their observations, but their inferences.

Yet Berkeley did not contradict what is called common-sense one whit more than it has ever been contradicted by all philosophers. Take, for example, Sir William Hamilton—the self-styled advocate of common-sense. Turn to the passages in which he expounds his favorite doctrine, that all the senses are mere modifications of Touch. You ask : What about the vision of distant objects ? Do I not see an object miles away, and will you call this a modification of Touch ? He answers : It is a mistaken inference from the facts to say that you perceive any distant object. What you really perceive is a picture on your own retina, and nothing more. How is it true, then, that ten men looking at the moon see the same moon, if this theory be correct ? He answers : They do not see the same moon ; each man only sees the moon on his own retina. Well, then, I reply, *à la bonne heure* : This may be excellent philosophy, but it is not common-sense. This is not what the public believe, and when you explain it to them they will tell you that you are talking nonsense, and that such denials of the plain data of the senses lead at once to scepticism.

The attack on Kant's theory of space and time is exactly of the same kind ; though his public is not the ordinary public, but the public of old-fashioned philosophers. Kant denies no fact ; he is admitted, on the contrary, to have accounted for every thing by his theory ; but because he rejects an old and false assumption, therefore he is called a sceptic. But if Hamilton could not escape an accusation of this kind—Hamilton, who pandered as far as any philosopher could to the verdict of the vulgar —Kant was not likely to escape. Neither will any originator of a new system escape it, however he may dock his system, or hamper his freedom, by concessions either to common-sense or

to popular theology. I earnestly press this consideration upon all young thinkers, as it may save them trouble beforehand and annoyance afterwards. This, then, is the first prophecy which the history of philosophy compels us to make about its future.

The second point is equally certain, and perhaps more important; for it is not very likely that the rising generation will be over afraid of scepticism, and even anxious enough to repudiate the charge. It may be prophesied that whatever new system attempts to replace Kant's will be open to the second great charge made against the Critick—that it is *unsatisfactory* and incomplete. But this is the charge, not of the vulgar, but of consistent thinkers, who desire to see the problems of being and knowing solved, and feel keenly the doubts and difficulties that still surround them. This second great objection to Kantism is brought by all the adherents of newer systems, especially by the Hegelians. It is true, they say, that you have explained a great deal; it is true that you have led metaphysical speculation into a new path, and that from you we must all set out henceforth on our voyage of discovery. But your system cannot satisfy us. You have tied down the human mind to a mere knowledge of phenomena, and have nevertheless admitted something beyond, a *Ding an sich*, which the mind requires and supplies for phenomena, and which we nevertheless cannot grasp or understand. This will never satisfy us. Let us go beyond and find out what this *Ding an sich* is, which is after all a mental datum of some sort. Let us not abandon our speculation upon the world, the soul, and God.

But let us ask, Have these newer systems approached one whit nearer to the goal at which they aim? Has any modern thinker so mapped out the chart of the human intellect and of the world which he seeks to grasp, that we can sit down and say, Here is a final solution; here is the sum and end of metaphysic? The Hegelians have indeed boasted that this is so with their master. They say his philosophy includes and explains every thing, and that, when properly understood, it affords a solution for every difficulty. But, in the first place, it starts from an assumption, which is only verified by the consistency of the system, and which offers no other test of its truth; and, in the second place, is it historically true that it has satisfied any but

a few enthusiasts? Like every other attempt in metaphysic, it has offered a solution acceptable at a certain season and to certain minds, but perfectly sure to be superseded according as the course of time brings out new discoveries in science and new problems in the field of metaphysic. This is equally true of all the other systems which we have seen rise, flourish, decay, and die within our own time. Stewart, Brown, Hamilton, Mansel, Ferrier, and I may already add Mill, have had their day and their following; but soon a deeper examination discovered flaws, and they were cast aside by the thinking men who are ever seeking for a firmer basis and for sounder materials.

Why, then, is not this also the case with Kant? Why has he not died out like the rest? Because the unsatisfactory part of his system is not the outset, not the reasoning, but the residuum left when his system is complete. With Hegel we meet at the very outset when he postulates a new kind of substance called Thought, which we never knew before; and this assumption keeps exciting our suspicions all the way through. But Kant, like the old-fashioned tuners, has gathered his Discord, his *wolf*, as they called it, into a single key. He has started from the data of positive science, from the data of experience, and he leaves off at the limits of this definite field. There is beyond, he admits, something more. It is possible that in some future state we may know not only more in degree, but new things in kind. Our knowledge is not good for all things, but only for the things of this mortal experience. So far it is satisfactory, but to assert more would be to assert with Hegel that the logical process of the idea is equal to the creative and all-embracing intellect which we ascribe to the Deity.

Here, then, at the outmost limit of philosophy, Kant is unsatisfactory, if you will, but I cannot conceive any new system which will satisfy human curiosity at this point. Absolute idealism has been tried long enough. The denial of any thing *per se*, and the assertion that it is only a product of mind, has failed to satisfy us. Any realist system which starts by assuming it must of course fail to prove our knowledge of it by any evidence. Hence it still remains the stumbling-block of philosophy, the idea, as Kant said long ago, which all our thinking strives to attain, and which it never can possibly grasp.

This is the rock upon which every metaphysical system will strike which attempts to afford a solution to all the mysteries of knowing and being. It is perfectly idle to assume that human nature will ever unravel all its mysteries ; that the mists of ignorance and the twilight of faith will ever make way for the clear light of science ; that the day will ever come when we may send our children to the sophist, and have them taught certain and universal knowledge. Whatever else, then, any new system may claim, let it not expect to attain finality ; let it not expect to escape the charge of incompleteness ; let it not hope to satisfy the eternal craving after certainty, the eternal hunger after perfection.

If it will attain even a temporary permanence, if it will seek even for a time to satisfy inquirers after truth, let its mystery, its surd quantity, its blind spot, be placed, not at the outset and among its assumptions, but in its outskirts, and beyond the bounds of its logical structure. For this sort of incompleteness may really be the necessary result of the limitations of human thought ; it may be no fault of the system, though men will not be persuaded of this, though they will try again and again to overstep the limit, and attempt to know the unknowable.

But, as each effort fails, they will revert to that system which has at least offered a simple and scientific solution of the facts and principles in our ordinary experience. This Kant claims to have done ; and as yet I can find no system which rivals or even approaches his Critick in breadth of grasp, in acuteness of insight, and in sobriety of temper.

J. P. MAHAFFY.

## CHRISTIANITY AND CHRISTIANS AT THE COURT OF THE ROMAN EMPERORS, BEFORE THE TIME OF CONSTANTINE.

ON the 13th of January, B.C. 27, the younger Cæsar, Octavian, gave back to the Senate and the people, in accordance with his duty, the constitutive powers which they had intrusted to his hands. On the 16th of January of the same year he received from the Senate the title of Augustus. During a period of twenty-two years, the constitutional order of the Republic had been suspended through the exercise of extraordinary powers; now, however, it was to be established once more in a new and permanent form. And yet those days were truly the birth period of the Roman Empire; for the empire arose from the primacy of Augustus. To be sure, the form of government which came into existence at this time was as yet far from being an absolute monarchy.

It would be more correct to designate the new rule as a dyarchy; for the supreme power was to be divided once for all between the Senate and Augustus as one in whom the community reposed the fullest confidence. Augustus himself, as the foremost citizen of the state, professed to stand not *above*, but *under* the law.<sup>1</sup>

In reality, however, that same road to absolute monarchy was again opened, which lay in perspective before the mighty Cæsar;<sup>2</sup> and Augustus—cautious and pliant, as was his wont—

<sup>1</sup> Cf. Mommsen, *Römisches Staatsrecht*, vol. ii., part ii. (1875), p. 707 seq. "Dyarchie," p. 709.

<sup>2</sup> Mommsen, *ibid.*, p. 716: "No doubt the Dictator Cæsar purposed to re-establish the kingly power, either under its old name or stamped with a new designation."

had already set foot upon this way. His successors of the Julian and Claudian lines sought, with Cæsar-like madness, to possess themselves of this way by force. The energetic Trajan guided the ship of state into the same course with a surer hand, and the whole world submitted itself more readily to him and to his great successors. It was not, however, until the third century, at the time of the general dissolution, that the seal of reality was put upon the despotism of the emperors by the legislation of Diocletian; and it was only by Constantine and the Christian-Byzantine emperors that this despotism was carried out in due form.

In the first Christian centuries, a part of the Roman aristocracy sought to arouse opposition to this development of power. Vain struggle! These efforts soon grew weak, though in Rome indeed they never quite died out. In the provinces—above all, in the Eastern ones—the people were from the outset favorable to the empire. The imperial rule was there felt to be a release from the severe *régime* of the republic. The masses too, at the capital, and indeed in every place, hailed with shouts the Cæsars, who were obliged to keep their interests in mind.

These masses were not tied to the memories of the old aristocratic republic, nor did they trouble themselves about fine points of political legality. While the aristocracy of Rome were anxiously busying themselves over the relics of the past, and were testing and weighing names and titles,<sup>1</sup> the multitude proceeded upon the practical principle—"he that has the power is the master, and he who gives bread is the father of his country"—both, in truth, lay in the hands of the emperor.

From the legal side, this process of development led, by an inherent necessity, to the unlimited sovereign ("dominus," δεσπότης); from the side of religion, under the existing relations, to the emperor as a god born in human form.<sup>2</sup>

The appellation "our lord and god" remained in vogue as an imperial title until after the middle of the third century, and at last, to the disgrace of ancient Rome, it even appeared upon coins, as if an official designation.<sup>3</sup>

<sup>1</sup> Mommsen, *ibid.*, p. 721 seq., 723 seq.

<sup>2</sup> Mommsen, *ibid.*, p. 716.

<sup>3</sup> Mommsen, *ibid.*, p. 720, n. 3: "There are coins with the inscription 'Deo et domino nato Aureliano Aug.' (Eckhel, 7, 482; Cohen, *Aurel.* 170), and 'Deo

That, however, which this title expresses existed in the first century. Even Julius Cæsar had proclaimed himself as a living god; Augustus—with greater foresight—as a son of the gods and as a future divinity. But the emperors did not merely continue to live after death as deified beings; even while they were still alive their statues stood among those of the gods in

et domino Caro Aug.' (Cohen, *Car. 44*).” Even before this time, Domitian had assumed similar titles. *Rex*: The Cæsars avoided using this title; it was, however, often assumed by the Greeks and Orientals (cf. N. T., the Greek Apologists, Justinian, Athenagoras, Melito, etc.; also Mommsen, *ibid.*, p. 723 seq.). Also Minucius Felix calls the emperor simply “*rex*” (*Octav.* 29, 5). *Dominus*: It was only very gradually that this title won itself a place. “The inner development of the monarchy from primacy to supremacy can be traced and measured with the greatest certainty by means of the transition in terminology from ‘princeps’ to ‘dominus.’” Cf. Mommsen, *ibid.*, p. 721 seq., and the interesting excursus by Friedländer (*Sittengeschichte*, etc., vol. i. [4th edit., 1873]): “Ueber den Gebrauch der Anrede ‘domine’ im gemeinen Leben” (p. 428–435). Cf. also the very frequent use of *κύριος* (as an appellation?) in address in the *Shepherd of Hermas*; the expression *κύριοι μον ἀδελφοί* in Eusebius (*Hist. eccl.* vi. xi. 6); the address *κύριε* in the letter of Julius Africanus to Origen (Routh, *Relig. Sacr.*, T. ii. [2d edit., 1846] p. 225). Tertullian, *Apolog.* 34: “Augustus imperii formator ne dominum quidem dici se volebat: et hoc enim dei est cognomen. Dicam plane imperatorem dominum, sed more communi, sed quando non cogor, ut dominum dei vice dicam. Ceterum liber sum illi. Dominus enim meus unus est, deus omnipotens, æternus, idem qui et ipsius. Qui pater patriæ est, quomodo dominus est? Sed et gratius est nomen pietatis quam potestatis. Etiam familiæ magis patres quam domini vocantur.” *Deus*: Mommsen, *ibid.*, 716 seq., 763 seq.; Friedländer, *ibid.* vol. iii., p. 455 seq.; Boissier, *La religion Romaine d'Auguste aux temps des Antonins* (1874), T. i. pp. 122–208. The Christian Apologists offer the most violent opposition to the worship of the emperors. Cf. Justin, *Apol.* i. 21, 55; Tatian, *Orat. ad Græc.* 10; Minuc. Felix, *Octav.* 29, 5: “Etiam principibus et regibus, non ut magnis et electis viris, sicut fas est, sed ut deis turpiter adulatio falsa blanditur, cum et præclaro viro honor verius et optimo amor dulcior præbeatur.” Tertullian, *Ad. nat.*, i. 10; *Apolog.* 28–40, e. g., Cap. 33: “Negat ille imperatorem, qui deum dicit, nisi homo sit, non est imperator.” Cap. 34: “Tanto abest, ut imperator deus debeat dici, quod non potest credi non modo turpissima, sed et perniciosa adolatione. . . . Sive non de mendacio erubescit adulatio eiusmodi hominem deum appellans, timeat saltim de infausto. Maledictum est ante apotheosin deum Cæsarem nuncupari.” Even as early as Pliny’s time, we read in his famous letter to Trajan (Plin., *Ep.* xcvi.): “Qui negarent esse se Christianos aut fuisse, cum præeunte me deos appellarent et *imagini tuae*, quam propter hoc iusseram cum *simulacris numinum adferri*, ture ac vino supplicarent, præterea maledicenter Christo, quorum nihil posse cogi dicuntur qui sunt re vera Christiani, dimittendos esse putavi.” Similar expressions occur from the second century onward in the majority of the Acts of the Martyrs.

the temples<sup>1</sup> and oratories, and, above all, near the standards in the camps; and in all these places honors had to be paid to them.

Oaths were taken by the names of the emperors and their predecessors in the same way as by the names of the gods. Here a false oath, and even any oath by the name of a private person, was regarded as treason.<sup>2</sup>

The yearly emperor days, especially the third of January (this New Year's day was also reckoned as an emperor-day), were religious festivals. Votive offerings, whether of thanksgiving or of supplication, were paid to the genius of the emperors.<sup>4</sup>

It was held to be an infringement of imperial rights to celebrate publicly the birthday of any private person,<sup>5</sup> or to present votive offerings to him.

Still more sharply was it resented if any one in the empire dared to ascribe divine attributes or power to any other than the emperor.<sup>6</sup> Not unfrequently the charges of treason and impiety toward the gods were united. Whoever fell under this charge could expect nothing else (at least after the end of

<sup>1</sup> Mommsen, *ibid.*, p. 719. See also the above letter of Pliny. Tiberius also, and Gaius, at the beginning of his reign, had forbidden this.

<sup>2</sup> Mommsen, *ibid.*, 766. Tertull., *Apolog.* 29: "Nam utique suas primo statuas et imagines et ædes tuerentur, quæ ut opinor, Cæsarem milites excubias salva præstant."

<sup>3</sup> Mommsen, *ibid.*, p. 763 seq. For this reason, it was required of Christians in lawsuits to revile Christ and to swear by the genius of the emperor (e.g., in the letters of Pliny and of the martyr Polycarp, 9, 2, 3, 10, 1, and often elsewhere). Tertull., *Apolog.* 32: "Sed et iuramus sicut non per genios Cæsarum, ita per salutem eorum, quæ est augustinor omnibus geniis." He ridicules the punishment of a false oath upon the genius of the emperor, as follows: *Apolog.*, cap. 28): "Citius denique apud vos per omnes deos quam per unum genium Cæsaris peieratur." Similarly in Minucius Félix, *Octav.* 29, 5: "Sic eorum numen vocant, ad imagines supplicant . . . , et est eis tutius per Jovis genium peierare, quam regis."

<sup>4</sup> Mommsen, *ibid.*, p. 764 seq. See also the exceedingly interesting description by Tertullian (*Apolog.* 35: "Religio secundæ majestatis").

<sup>5</sup> Mommsen, *ibid.*, p. 766, note 1.

<sup>6</sup> Mommsen, *ibid.*, p. 769, note 1, Tertull., *Apolog.* 34: "Tamquam si habens imperatorem alterum appelles, nonne maximam et inexorabilem offensam contrahes eius, quem habuisti, etiam ipsi timendam quem appellasti."

the second century) than to be treated before the law as a slave.<sup>1</sup>

The real sanctuary of Rome, the sanctuary of the world, was no longer on the Capitoline hill, but in the palace on the Palatine.

Religions, mysteries, and different forms of worship in almost endless variety had extended themselves over the mighty empire; the worship of the emperor had become the religion of the world. The Roman Empire possessed in reality *one* common religion—the worship of the Cæsars. Such a universal religion was a necessity to the empire. History presents no example of a despotism without the foundation of a common form of worship.

The arm of the most terrible inquisition is powerless unless it be strengthened by the benediction of an alleged and recognized God. Only a universal religion can meet the requirements of a universal despotism. But such a religion must have its prominent characteristics as well as the state which it is to serve. We can clearly see to-day that the progress to monotheism, in its various manifestations in the Roman Empire since the beginning of the third century, was not only the result of a process of decomposition in the popular religion under oriental influences, but also a natural outgrowth of the political condition of the empire. This monotheism is therefore quite a different one from the Christian—indeed only a caricature of it. Its extension, however, was hostile to the mission of the church.

As early as the third century (perhaps even the second), Christianity was drawn into this movement, and then in the fourth was placed by an emperor upon the throne, because it gave satisfactory answers to questions which the *heathen* had propounded, and because it furnished a means of power which

<sup>1</sup> Mommsen, *ibid.*, p. 715. Exceptional cases of this kind had already occurred. The Jewish and Christian eschatological hopes stood in opposition to the law (Paul., *Sentent. recept. l. v.*, tit. 21, n. 3): ‘Qui de salute principis vel de summa reipublicæ mathematicos, ariolos, aruspices, vaticinatores consulit, cum eo qui responderit, capite punitur.’ ‘Adduntur hæc: non tantum divinatione quis, sed ipsa scientia eiusque libris melius fecerit abstinere.’ Cf. Justin., *Apol.* i. 44, and concerning the kingdom of Christ, cf. Euseb., *Hist. eccl.* iii. 20, 6.

they needed and sought. Supported by *such* a Christianity, the despotism of the world received its final seal. To be sure the emperor as deity was now obliged to give way. But “the God-favored imperial Lord” only shone with the greater glory.<sup>1</sup>

Emperor and god in one person—this seemed in the second and third centuries the best means for uniting church and state. The state was the world, the emperor’s palace was the kingdom of heaven, the emperor was god. Such was the end and aim of this development. And yet this religious monstrosity, this most pitiable of all substitutes for religion, was the bond which for long centuries held the mighty empire together. Inside of this bond the state exercised an almost unlimited toleration of all religions and of all forms of worship; here, however, in the worship of the emperor, was the point where the state made no concessions. Here was the point where the new religion, *the faith of the Christian Church*, which was as old as the empire, made no concessions.

Jesus sent forth his disciples with the injunction, “Go ye into all the world.” Christianity never forgot and could not forget the obligations of its mission to the world. The first followers of Christ had departed from Palestine preaching the doctrines of one God, the supernatural Ruler of the world, the Father of mankind; of the Son of God, Jesus Christ, the Saviour and King, who founded his kingdom through his life and sufferings, a kingdom which was to extend to the ends of the earth; of his resurrection and of the return of this King in glory for the consolation of his people and for the confounding of all the mighty ones of earth; bearing also the message of the resurrection of the dead and of a blessed immortality.

This preaching was not intended as a protest, much less as a declaration of war against the existing order of things in the

<sup>1</sup> It is only a surprising caricature of the above-mentioned ideas which has led Bruno Bauer (*Christus und die Cäsaren. Der Ursprung des Christenthums aus dem römischen Griechenthum*. Berlin, 1877) to the conclusion that Christianity in Rome and in connection with the rise of the empire was originated by Seneca and by kindred spirits at the court of Nero, and that by the reception of Jewish elements it gradually developed into a religion by itself. This truly throws an entirely new light upon “Christianity at the court of the emperors.” It is not my purpose in the present essay to enter into any further discussion of this book.

world, or against the rights of those in power. On the contrary, obedience was enjoined upon the disciples and a conscientious respect for the powers that be as ordained of God. In the command, "Render unto Cæsar the things that are Cæsar's, and unto God the things that are God's," a twofold idea is embraced. The service of the emperor and the service of God are two distinct spheres of action; but they can and should exist beside each other. This has quite another tone from the utterances of those Jewish revolutionary spirits who in their fanaticism stirred up the masses against the empire as the kingdom of Satan. The Christian churches continued mindful of their master's command, even in those times in which they stood under the bloody axe.

I know of no more inspiring impression in the history of the early church than that presented by the church in offering conscientious, faithful obedience to their not merely "strange" but dreadful master. This they maintained from the time when the Apostle Paul enjoined upon the Romans to be subject even to a Nero, down to those fearful days under Diocletian, when the Christian communities, had they been so disposed, might have kindled a most terrible civil war. They were strong enough in numbers, and their organization was the most perfect in the empire. But just as since the time of the apostles they held no religious service without remembering in their prayers the emperor and others in authority,<sup>1</sup> so in these disastrous years they held out till the hour of their deliverance struck.

It cannot be denied that individual men here and there allowed themselves to be borne away into rebellious demonstrations and into acts of revolution. We cannot consider it otherwise when we read, for example, that slaves and soldiers, in answer to the question, "Whom serve ye?" replied, "Christ;"

<sup>1</sup> Cf. Rom. 13:1-6; 1 Pet. 2:13, seq.; 1 Tim. 2:1, seq.; Tit. 3:1; Clem., *Ad Cor.* i. 61; Polyc., *Ad Philipp.* 12, 3; Just., *Apolog.* i. 14 (p. 61 C.), 17 (p. 64 D.); Mart., *Polyc.* 10, 2; Theoph., *Ad Antol.* iii. 14; Athenag., *Supplic.* 37; Tertull., *Apolog.* 30, 31, 32, 39; *Ad Scapul.* 2; Cypr., *Ad Demetr.* 20; Orig., *Contra Celsum*, viii. 73; *Acta Dionys. Alex.* in Euseb., *Hist. eccl.* vii. 11, 8; *Constitut. Apost.* vii. 16, viii. 10. Prayer for the emperor is often mentioned in the Acts of the Martyrs.

or still more inconsiderately, "No man, for Christ has made us free."<sup>1</sup>

In the first place, however, such instances are exceptional, and then, too, they were sometimes at least blamed by the church writers. Again, the fact must not be overlooked that the views of the Jews concerning the Roman government had a great influence among the Christians, especially at the outset.<sup>2</sup>

Thus much, however, is certain, that no Christian took up arms against his ruler and emperor, that the Christians never joined in any revolutionary movement,<sup>3</sup> and that their loyalty was above all suspicion.<sup>4</sup> Indeed, on the authority of the records, we must go a step further. Even as early as the second century, the Christians abundantly emphasized the solidarity between Christianity and the empire. For this we have the

<sup>1</sup> Revolutionary confessions: *Act. Justini*, cap. 4; *Passio Maximiliani* (Ruinart, *Acta Mart. sincera* [1731], p. 263 seq.) *Marcelli* (Ruinart, l. c., p. 264 seq.) *Cassiani* (Ruinart, l. c., p. 267 seq.), and frequently cf. also the essay of Tertullian, "De corona."

Tumultuous thronging to the tribunal and striking of hands: Tertull., *Ad Scapul*, 5. Dionys. of Alex. in Euseb., *Hist. eccl.* vi. 40, vii. 11, 22. We also find evidences of the same in a few other places.

Tearing down the imperial edicts in Nicomedia: Euseb., *Hist. eccl.* viii. 5.

<sup>2</sup> Cf. especially the Revelation of John. The Jewish Revelations and the Sibyls were much read in the early church. The Roman Empire is interpreted according to Daniel as the last of the four Antichrists. Still it is worthy of notice that the Christians seldom carried out this view to any practical results. We find, moreover, dissenting views concerning Roman history in the Apologists, even in Min. Felix, *Octav.* 25.

<sup>3</sup> Cf. Tertull., *Apolog.* 35; *Ad Scapul*, 2. The teachings of the Christians concerning the kingdom of Christ not revolutionary; cf. Hegesippus in Euseb. *Hist. eccl.* iii. 20, 6. The same is true of the Christian cosmopolitanism; cf. Tertull., *Apol.* 38, 39, "Unam omnium rempublicam agnoscimus mundum." Min. Felix, *Octav.* 17, 2; 31, 8; 37, 10. The mockery of Celsus and Lucian (Peregr. 13). The Apologists take pains to show that the assembling of Christians and their contributions of money were not attended with any political dangers (Tertull., *Apolog.* 39). Prayers "pro omni statu imperii rebusque Romanis" (Tertull., *Apolog.* 32), because the terrors of the judgment-day still awaited the Roman Empire (II. Thess. 2, 6 seq.). We find indeed a striking contrast to this in the views of the Roman Empire as found in the Apocalypse of Daniel, and in Tertullian's interpretation of the second (third) petition in *De orat.* 5: "Optamus maturius regnare et non diutius servire."

<sup>4</sup> Tertull., *Apolog.* 37: "Si non apud istam (scil. Christianam) disciplinam magis occidi licet quam occidere." Similar expressions are very often found in the Apologists, especially in reply to the charge of eating human flesh.

strongest proofs at hand, of which the most convincing may be presented here. It is a surprising phenomenon that, in the consciousness of the early church, the memory of the persecutions of very many of the emperors, except those of Nero and Domitian, not only very quickly faded out, but passed over into something just the opposite. This in some instances led even to the fabrication and forging of edicts of toleration. Such were ascribed to Trajan, Hadrian, Antoninus Pius, Marcus Aurelius, and even Domitian.<sup>1</sup>

The Christians could not and would not believe that those rulers, whom they otherwise held in high esteem on account of their wisdom, justice, and other prominent virtues, could have been persecutors. The inconsistent legislation against the Christians and its arbitrary and forcible execution strengthened them in this view. And since they saw a great providential dispensation in the circumstance that the empire and Christianity were born at the same hour, and since furthermore, from the destruction of Jerusalem by Rome, they believed themselves compelled to recognize that God himself had associated the empire with the church, therefore they saw in the empire, in spite of the multitude of conflicting experiences, their God-appointed ally.<sup>2</sup> In proof of this, we may adduce the preface of a letter of protection for Christianity, which Bishop Melito, of Sardes, presented to the Emperor Marcus Aurelius, about the year 177. He there says:<sup>3</sup> "Our philosophy flourished previously among the barbarians, but when it reached thy people, under the powerful rule of thy predecessor, it became a fortunate omen for thine empire. For since that time the power of the Romans has constantly gained in greatness and splendor.

<sup>1</sup> Cf. Overbeck's comprehensive and instructive article in the *Studien zur Geschichte der alten Kirche* (1875), Heft I.

<sup>2</sup> Cf. Justin., *Apolog.* i. 1 seq., 17 seq., 32, 47, 63; *Dialog. cum Tryph.* 86, 177; Athenag., *Supplic.* 18: ἔχοιτε ἀφ' ἑαυτῶν καὶ τὴν ἐπουράνιον βασιλείαν ἐξετάζειν, ὡς γὰρ ὑμῖν πατρὶ καὶ νιῷ πάντα κεχειρωταί, ἀνωθεν τὴν βασιλείαν εἰληφόσι, οὗτος ἐν τῷ θεῷ καὶ τῷ παρ' αὐτῷ λόγῳ νιῷ νοομένῳ ἀμερίστῳ πάντα ὑποτέτακται. The loyal naïveté of Athenagoras is also clearly exhibited in chap. 34 fin. Theophil. *Ad Autol.* iii. 27: ἔκποτε ἦδη οἱ Ῥωμαῖοι ἐμεγαλύνοντο τοῦ θεοῦ κρατίνοντος αὐτούς Iren. ii. 6, 2; iv. 30, 3. Tertull., *Apolog.* 4, 5, 33-37. *Ad nation.* i, 7, *De idolol.* 9. *Ad Scapul.* 2, etc. etc. The title "rex," denoting the emperor, was quite often used by the Christians.

<sup>3</sup> Cf. Euseb. *Hist. eccl.* iv. 26, 5 seq.

Thou now ascendest the throne amid general rejoicing, and furthermore thou wilt not lose thy reward if thou givest thy protection to that philosophy which began with the reign of Augustus, and to which he was a foster-brother, and which has also been held in honor by thy predecessors at the side of other forms of religion. The fact that the monarchy since the reign of Augustus has met with no disaster, but that, on the contrary, glory and fame have extended everywhere according to the general desire, furnishes the strongest proof that our doctrines have been a blessing to the sovereign power, together with which they have flourished, and which began under such favorable auspices."

These sentiments are not merely loyal, but they are suspiciously so, and the historical retrospect of the apologist is far from being consistent with the facts.

So much, however, follows with certainty: that the Christians sought to avoid a conflict as long as they were able. But the conflict could not fail to come. These two considerations were sufficient: that they did not dare to deny their lord and king as such, and that they must refuse to worship the picture of the emperor. To this the government answered—not indeed at once, but after the beginning of the second century—by prohibiting the Christian religion; a prohibition which was in force from the Euphrates to Spain, and from Egypt to Britain. It is a very instructive task to follow out the results of this proscription in the East and West.

It is especially interesting, however, to seek an answer to the questions, whether the Christian faith had penetrated into the emperor's palace at the time of the persecutions, and what the persecuting emperors knew of Christianity.

The palace of the emperor, situated on the Palatine hill, opposite the Capitoline, formed a separate part of the city, and the court of the emperor ("familia," "domus") consisted of many thousands. We possess to-day, through the inscriptions found in the excavations, more trustworthy information concerning the emperor's court than concerning almost any other part of imperial Rome. These inscriptions furnish us with

very accurate knowledge respecting the extent and arrangements of the court.<sup>1</sup>

The imperial court consisted not only of the relatives and friends of the emperor, but included also all those holding any office in the royal household. Originally such offices were entirely separate from those under the state. While the latter could be held only by free persons of equestrian or senatorial rank, those, on the contrary, who served in the court and palace of the emperor were his freedmen or slaves.

But the more the government developed into an absolute monarchy, the higher also became the respect paid to the court officers; and so it came to pass that even at quite an early period, senators and men of equestrian rank not unfrequently courted the favor of influential officers at the imperial court, nay even were obliged to demand their favor.<sup>2</sup> Thus it came about, further, that persons of equestrian rank were appointed to office in the emperor's household, and, on the other hand, freedmen and slaves were raised to the equestrian order and promoted to office under the state. The emperor wished to show that even in this respect his favor could create and support the aristocracy.

Even marriage relations were entered into with the noble Roman families.<sup>3</sup> In general, however, it remained the rule that the court offices were in the hands of the emperor's freedmen. There was a complete gradation, a hierarchy of offices under the emperor, from the lowest positions to those of the highest honor and influence. In the best period the most prominent offices were the secretaryship, and the offices of finance and of petitions. In after times, in proportion as the emperor, after the manner of oriental despots, required worship to be paid to him, the head chamberlain became the most influ-

<sup>1</sup> Cf. Friedländer, *ibid.*, vol. i., pp. 71-210. Mommsen, *ibid.*, p. 781 seq. Besides the inscriptions, statements concerning the "Domus Cæsaris" are found in (the) contemporary literature. Cf. e.g. Philo, *Flacc.*, p. 520. Tacitus, *Hist.* ii., 92. The references in Christian authors will be considered further on.

<sup>2</sup> Cf. Friedländer, *ibid.*, vol. i. p. 88 seq. Concerning the shameless conduct of these upstarts, cf. *ibid.*, p. 96 seq., 100 seq., 112 seq.

<sup>3</sup> Cf. Friedländer, *ibid.*, vol. i. p. 96 seq. Mommsen, *ibid.*, p. 783, note 5. The satirists often ridicule the flattery which the aristocracy paid to the freedmen.

ential person at court, nay even in the state. The catalogue below may serve to exhibit the variety of offices even before the time of Constantine. Of course there often belonged to a single office a large number of persons from the chief-secretary down to bureau servants, having no title.<sup>1</sup> We can measure the enormous extent of the imperial court from the fact that a special part of the palace was set apart for sick servants.<sup>2</sup> Every one holding these offices was entirely dependent upon the favor, caprice, and opinion of the emperor. A nod, and they became nothing.<sup>3</sup> Many, however, arose to high honor

<sup>1</sup> Cf. Lightfoot, *Ep. to the Philipp.* (3 edit. 1873), pp. 169-176: "Cæsar's Household." In this excellent excursus may be found also a catalogue of the offices connected with the emperor's court. The following list is somewhat fuller, but makes no claim to completeness: "Ab epistulis (divided into Latin and Greek subdivisions), a libellis, a rationibus (procuratio summarum rationum), dispensator rationis privatæ, procurator patrimonii, negotiator, sumptuarius, exactor tributorum, magister, paedagogus puerorum, a studiis, adiutor studiorum, procurator ab ephemeride, a manu, a memoria, nomenclator, a codicillis, procurator a mandatis, a cognitionibus, tabellarius, a Bibliotheca Latina Apollinis, a Bibliotheca Palatina Græca, chirurgus, ocularius, astrologus, procurator thesaurorum, præpositus auri escarri, ab argento potorio, præpositus a crystallinis, præpositus a fiblis, a cura catellæ, argentarius, procurator prægustatorum, coquus, triclinarius, triclinarcha, procurator vinorum, rationalis vino-rum, a vesti regia, a vesti forensi, sutor, tonstrix, sardinatrix, unctor, præpositus velariorum, ostiarius, pedisequus, lecticarius, diaetarchus, præfectus s. cubiculi, cubicularius, procurator balnei, villicus hortorum, a lapidicinis, architectus, curator aquarum, castellarius, ornator, histrio, saltator, designator, symphoniacus, musicarius, tessararius, a muneribus, curator munerum ac venationum, a commentariis equorum, præfectus vehiculorum, procurator castrensis, a suppellectili castrensi, a pendice cedri, a frumentis, procurator rationis purpura-rum," etc., etc.

It is possible that some of these offices were identical with each other, but this could be true of only a few. The difference too between "curator" and "procurator" should be noticed. The above list may be augmented still further on the one hand by the number of royal servants in the emperor's private possessions, manufactories, mines, etc., in the provinces; on the other hand, by the multitude of attendants having no title (concerning "vicarii," see Friedländer, *ibid.*, vol. i. p. 121), pages, consecrators, favorite slaves, etc. Finally, it must be remembered that the emperor's freedmen of high rank were in the habit of owning large numbers of slaves who, with their masters, belonged to the court.

<sup>2</sup> Friedländer, *ibid.*, vol. i. p. 108 seq.

<sup>3</sup> Concerning their position before the law, which differed but little from that of the other slaves and freedmen, cf. Mommsen, *ibid.*, p. 783 seq. It may be remarked that the freedmen usually took the family name of their masters, so that it is often possible, from the name, to know to what family of the aristocracy

and, what is most surprising of all, to great wealth.<sup>1</sup> Still, large as the number of such cases was, they were only exceptional. Who can estimate the vast multitude of those who had no names, the slaves of other slaves, who had the hardest lot!

Even at the best, it was a splendid wretchedness at this court, and only too often it was the seminary of vice and crime —frequently misery without splendor. They could never be assured of an honorable burial; they possessed no right over the disposal of their property. How would every glimmer of friendly light be greeted by these poor unfortunate people! How the full sunlight of day, as it dawned upon them! We may complete the picture by noticing the fact that the body-guard of the emperor consisted almost without exception of German troops, famous in Rome on account of their loyalty. They had the same part to play as the Swiss at the courts from the time of the middle ages till the present.<sup>2</sup> Also a co-

cracy the freedman or his ancestors belonged. It is of great importance to keep this fact in mind in our investigation (cf. Mommsen, *ibid.*, p. 725 seq.; concerning the double names of the royal slaves, see *ibid.*, p. 783, note 5). Finally, we refer again to the apt developments of Lightfoot (*ibid.*, p. 170): "At the same time the connection with Cæsar's household doubtless secured even to the lowest grades of slaves and freedmen substantial though undefined privileges and immunities, and conferred on them a certain social importance among their equals, which made them value their position." See Plin. *N. H.* xiii. 5: "Marcelli Æsernini libertus sed qui se potentia causa Cæsaris libertis adoptasset." *Hist. Aug.* Pertinax 8: "Redidit præterea dominis eos qui se ex privatis dominibus in aulam contulerant."

<sup>1</sup> Examples in Friedländer, *ibid.*, pp. 88 seq. 121, taken from Pliny, *Hist. Nat.* vii. 129; xxxiii. 145; Tertull., *De pall.* 5; Sueton., *Otho* 5. Especially interesting is the inscription cited by Henzen, No. 6651: "In a columbarium on the Appian Way, near the tomb of the Scipios, was found the epitaph of the cashier of the imperial head treasury in Gallia Lugdunensis. He was a slave of Tiberius. The monument was set up by sixteen slaves ('vicarii'), who were accompanying him on his journey to Rome, when death overtook him. Such a retinue gives us a correct idea of the magnitude of the entire household. It consisted of two secretaries, two chamberlains, two cooks, two attendants, two butlers, a physician, a wardrobe-keeper, a business manager, an husbandman and an anonymous person."

<sup>2</sup> Cf. Tacitus, *Annal.* xv. 58. *Hist.* i. 31, iii. 69; Mommsen, *ibid.*, p. 762; Marquardt, *Röm. Staatsverwaltung*, vol. ii. (1876), p. 471 seq. The ridicule of Renan (*Antichrist* [German edition, 1873], pp. 97, 243, note 2) at the fidelity of the ancient Germans is ill-applied.

hort of the royal prætorian guard was stationed day and night in the palace. Their barracks (the prætorium) were situated in the north-eastern part of Rome, near the Porta Viminalis.<sup>1</sup> In the third century the prætorians not only dethroned emperors, but also placed them on the throne. The commander ("præfector prætorii") was at the same time chief of the police at Rome, and held the most important office in the city.

Whence, now, originated this immense multitude of imperial slaves and freedmen? They were brought together from all parts of the great empire. We hear of pages from the Crimea, slaves from Britain, slaves from Barbary.<sup>2</sup>

The chief quota, however (and this is an important fact), was furnished by the Orient and by Greece.<sup>3</sup> The finer culture of the Greeks, their business capacity and inventive genius, and the pliant nature of the Orientals, made them both in special demand. We must assume that the emperor's palace was the chief centre of oriental life in the world's capital—a city which, at the time of the emperors, was half Oriental, half Greek.<sup>4</sup> As for the rest, the inhabitants also of the imperial court were constantly fluctuating, since large numbers were sent to the private estates of the emperors in the provinces, and fresh recruits came to the city.

There were, however, among the oriental slaves many Jews.<sup>5</sup>

<sup>1</sup> Cf. Mommsen, *ibid.*, p. 762; Marquardt, *ibid.*, pp. 389, 460 seq.

<sup>2</sup> De Rossi, *Bullett. di Archeol. crist.*, i. 72, v. 75. The inscriptions came from the house of the royal pages on the slope of the Palatine.

<sup>3</sup> Cf. Friedländer, *ibid.*, p. 78 seq., and the thorough investigations of Caspari, "Griechen und Griechisch in der römischen Gemeinde in den drei ersten Jahrhunderten ihres Bestehens," in his *Quellen zur Geschichte der Taufsymbols* (vol. iii. 1875), pp. 267-466.

<sup>4</sup> Cf. Seneca ad. Helv. Cons. 6 concerning the population of Rome: "Jube istos omnes ad nomen citari et unde domo quisque sit quære: videbis maiorem partem esse quæ relictis sedibus suis venerit in maximam quidam et pulcherri-  
mam urbem, non tamen suam."

<sup>5</sup> The number of Jews in Rome can be estimated approximately, for the beginning of the first century, according to Josephus, *Antiq.* xviii. 3, 5 (cf. Tacit., *Annal.* ii. 85; Sueton., *Tibr.* 36), and *Antiq.* xvii. ii. 1. See, also, Cicero, *Pro Flacco* 28, concerning the Jews in Rome. Cf. Merivale, *History of the Romans*, vi. 257 seq.; Wieseler, *Chronologie d. apost. Zeitalters* (1848), p. 374 seq.; Schürer, *Lehrbuch der neutestamentlichen Zeitgeschichte* (1874), p. 624 seq.; Hausrath, *N. T.*, *Zeitgeschichte* (vol. ii. 1872), pp. 95 seq. 347 seq. (vol. iii. 1874), p. 71 seq.; Renan, *Paulus* (German edition, 1869), pp. 127-142. Cf. also "The

The number of Jews in Rome in the post-Augustan period may be reckoned in round numbers as over 20,000. They made themselves conspicuous then, as to-day, as venders of old clothing in the Circus Maximus and in Trastevere, as rich and not unfrequently titled bankers on the principal streets, as quack doctors, astrologers, and fortune-tellers in the mean quarters of the city, and as cultured missionaries among the aristocracy. And as the Jewish faith made its way, with the tenacity peculiar to that nationality, and kept spreading among<sup>1</sup> the highest circles of Rome, in spite of the ridicule of the satirists<sup>2</sup> and the contempt of the old Romans,<sup>3</sup> so were Jews also to be found even in the palace of the Cæsars, and that, too, in surprisingly large numbers.

Inscriptions inform us that the number of Jews at the court, even in the time of Augustus, was so great that they possessed a synagogue of their own.<sup>4</sup> When we read upon inscriptions of Jews named Aurelius, Claudius, Julianus, or of Jewish women named Flavia Antonia, Aurelia, Faustina, the supposition does not lie far off that they were the emperor's slaves or freedmen,

Apostles;" Huidekoper, *Judaism at Rome* (1876); Friedländer, *ibid.*, vol. i. p. 372, vol. iii. p. 509 seq.; Lightfoot, *Philip.*, p. 14; Caspari, *ibid.*, vol. iii. p. 268 seq. Cf. also the commentaries on the Epistle to the Romans, and on those Epistles of Paul written from his imprisonment; Seyerlen, *Entstehung und erste Schicksale der Christengemeinde in Rom*. (1874).

On the subject of Jewish-Romish inscriptions, good service has been done since Bosio (1632), especially by Garrucci in different articles (1862 seq.) and by A. v. Engeström ("Om Judarne i Rom under äldre tider och deras Katakomber." Upsala, 1876); see Schürer in the "Theol. Lit.-Zeitung," 1876, No. 16, p. 412 seq. The older literature is treated by Engeström.

<sup>1</sup> Cf. Seneca as quoted by Augustine, *De civitate dei*, vi. 11: "Cum interim usque eo sceleratissimæ gentis consuetudo convaluit, ut per omnes jam terras recepta sit; victi victoribus leges dederunt."

<sup>2</sup> Especially Horace, Martial, Juvenal, and others. Cf. the collection of passages in Huidekoper, *Judaism at Rome*, and Giles ("Heathen Records to the Jewish Scripture History," 1856).

<sup>3</sup> Especial attention is called here to the criticisms of Tacitus.

<sup>4</sup> Συναγωγὴ Ἀγγοστησίων: *Corp. Inscr. Græc.* 9902, 9903, cf. Fiorelli, *Catalogo del Museo Nazionale di Napoli, Iscriz. Lat.* 1956, 1960; Orelli, 3222; Garrucci, *Dissertazioni*, ii. 162, 12; Engeström, No. 3, 4, p. 31. There was also in Rome a συναγωγὴ Ἀγριππησίων: *Corp. Inscr. Græc.* 9907; Engeström, No. 2, p. 31. It is probable that Agrippa, the friend of Augustus, is here meant. Concerning other Agrippas, see Waddington, *Fastes des provinces Asiatiques* (1872), No. 94. For other Jewish synagogues in Rome, see Engeström.

or their descendants.<sup>1</sup> The Jews also had great influence. Through the Jewish court actor Alityrus, who stood in the highest favor with Nero, Josephus was introduced at Puteoli to the Empress Poppaea, and secured, through her assistance, the release of several Jewish priests from slavery.<sup>2</sup> Even the Empress Poppaea herself seemed to have been a kind of proselyte.<sup>3</sup> Thallas, a Samaritan and freedman of Tiberius, was able to lend a million denarii to the Jewish king Herod Agrippa.<sup>4</sup>

The relations between the Herods and the Julian and Claudian emperors were very intimate.<sup>5</sup> Other facts of like nature might be cited.

Thus, even in the first century, numerous points of connection arose between the Jews in Palestine and the imperial court.

And now, what was the condition of Christianity in this period? When did it come into the emperor's palace—the palace of the pretended god? Tradition has spun a manifold web around the relations between the imperial court and the Christians.<sup>6</sup> Just as in a primitive tropical forest the wild vines, radiant with flowers, twine around the old trunks, often clothing a dead tree in a robe of splendor, but sapping and killing a living one, so also legend and tradition have spun their web over many an old memory, covered over many a defect, and at the same time destroyed many a reminiscence, or perverted it to quite the opposite of the reality. We find here noteworthy variations in the records of the church. The earliest period to the time of Constantine is, as we have seen, very mild in its judgment

<sup>1</sup> *Flavia Antonina* : Engeström, No. 3. *Quintus Claudius Synesius* : E. No. 8. *Annianus*, son of *Julianus* : E. No. 9. *Julianus*, son of *Julianus* : E. No. 10. *Lucina* : E. No. 16. *Lucilla* : E. No. 44. *Alexander*, son of *Alexander* : E. No. 18. *Valerius*, husband of *Lucretia Faustina* : E. No. 19. *Gajus* : E. No. 24. *Julia* : E. No. 27. *Alexander* : E. No. 34. *Aurelia Camerina* : E. No. 35. *Aurelius Joses*, husband of *Aurelia Auguria* : E. No. 36. *Ælia Alexandria*, daughter of *Ælia Septima* : E. No. 37. *Flavia Dativa Flavia* : E. No. 38. *Marcella* : E. No. 41. Concerning Jews at the court, see Renan, *Antichrist*, p. 9, n. 2, 125 seq.

<sup>2</sup> Cf. Josephus, *Vit.*, cap. 3.

<sup>3</sup> Cf. Josephus, *Antiq.*, xx. 8, 11.

<sup>4</sup> Cf. Josephus, *Antiq.*, xviii. 6, 4. Concerning the court intrigues of the Jewess Acme, a female slave of the Empress Livia, see *Antiq.*, xvii. 5, 739; *Bell. Judaic.*, i. 32, 639.

<sup>5</sup> Cf. Schürer, *Lehrbuch der neutestamentlichen Zeitgeschichte*, p. 203 seq.

<sup>6</sup> Similar fictions can also be shown in Jewish tradition.

of the emperors and their edicts of persecution—yea, too indulgent and oblivious of them. There was also not much known about the relations between the emperors and the Christians at their courts. All this became changed, even in the third century, after the stormy times under Decius and Valerian. But it is only when we reach a later period—from the fourth century onward—that we find tradition inclined to paint the characters of *all* the emperors with a *uniform* blackness, just as if they were all furies like Domitian, frightful fools like Nero, or dreadful fanatics like Galerius.<sup>1</sup>

The same later tradition gives us accounts of very many Christians at the court, and of the personal relations of the emperors with them. Thus the Apostles Peter and Paul are said to have stood before Nero,<sup>2</sup> and Domitian himself is said to

<sup>1</sup> By far the greater number of the extant Acts of the Martyrs, relating to the first three centuries, are fabrications from the post-Constantine period. The traditional church representation of the period of persecutions has its origin in these forgeries. It corresponds passably to the character of the persecutions under Decius and Diocletian.

<sup>2</sup> Cf. the Acts of Peter and Paul in Tischendorf's *Acta Apost. Apocr.* (Renan, *Antichrist*, p. 9). Cf. especially cap. 31, 36 seq., 84. The tradition is found also in later writers with numerous variations (the Clementine Homilies and Recognitions should not be forgotten in this connection). Thus, in Joh. Chrysostomus, Asterius, Glycas, Theophylactus. Especially interesting are the *Acta Pseudolini*, lib. ii. (*Biblioth. Max. Lugdun.*, T. ii. p. 67 seq., 70 seq.) In Book I. Nero is mentioned only incidentally; but many women of high rank are alluded to. Thus, four concubines of the Praefect Agrippa, Agrippina, Eucheria, Euphemia, Dio. Also Xandippe, the wife of Albinus "Cæsaris amicissimi." In Book II. the influence of preaching is much more clearly seen: "Concursus quoque multus *de domo Cæsaris* fiebat ad Paulum, credentium in dominum Jesum Christum . . . sed et *institutor imperatoris* (i. e., Seneca) adeo est illi amicitia copulatus, videns in eo divinam scientiam." A "magister Cæsaris" read Paul's writings to him, and many "ex familiari obsequio Neronis" followed the Apostle.

Patroclus, who had formerly been a favorite youth of the emperor, and who was at the same time "ad vini officium," embraced Christianity. Barnabas, Justus, Paulus Quidam, Arion Cappadox, Festus Galata—these were Christian servants of Nero. Plautilla, a lady of high rank, appears as a friend of Paul. Thus a great part of Nero's court seems to have been Christian.

When Nero issued a general edict of persecution he was besieged by the masses(!) to retract it. Here, then, the truth of history appears fully falsified. Still, such historical views always find supporters. For example, in the representation of Count de Champagny (*Les Antonins*, edited in German by Doepler, vol. i., 1876, vol. ii., 1877) we find them repeated. I will not go into the details

have pronounced sentence of death upon John.<sup>1</sup> These are traditions which we leave out of the account. But even older legends are to be put aside. For example, those pretended reports of the miracles and death of Christ which Pilate is said to have sent to Rome.<sup>2</sup> Even before the end of the second century it is related by Tertullian that Tiberius, on the basis of these reports, made a proposition to the Senate to raise Christ to the rank of a god; but that the Senate, professedly on technical grounds, refused consent to this measure; that Tiberius, however, held fast to his view concerning Christ, and threatened with death those who had brought accusations against the Christians.<sup>3</sup> This is also mere tradition. The same is true of the pretended correspondence of Jesus with a certain king, Abgar of Edessa, who is mentioned in the third century,<sup>4</sup> and of the stories about the "legio fulminatrix" and Marcus Aurelius, etc.<sup>5</sup>

If we separate these and similar legends from the account, we have few highly-colored pictures left. Those we do possess can be compared only to paintings of ruins. But the work of putting together a small mosaic of that memorable epoch is not without its peculiar attractions, and at the very outset is full of

of this work, which in many respects is worthy of credit, in which, however, the history of the early church is related from an entirely uncritical and catholic standpoint.

<sup>1</sup> Cf. *Acta Johannis* in Tischendorf's *Acta Apost. Apocr.*; the account differs in *Acta Johannis auctore Prochoro* (*Biblioth. Max. Lugden.*, T. ii. p. 46 seq.). The martyrdom of John was presupposed by Polycrates even (*Euseb. Hist. eccl.* v. 24, 3). The oil-martyrdom is mentioned by Tertullian, *De prescr. hæres.* 36.

<sup>2</sup> Cf. the oldest traces of the Acts of Pilate: *Justin.*, *Apol.* i. 35 (38), 48 [?]. *Tertull.*, *Apolog.* 5, 21; the various essays referring to Pilate in Tischendorf, *Evv. Apocr.* (ed. ii., 1876), p. liv.-lxxx., pp. 210-458; *Euseb.*, *Hist. eccl.* ii. 2; *Epiph.* 50, 1; *Acts of Pilate* from heathen sources at the order of Maximinus (*Euseb.*, *Hist. eccl.* ix. 5, 7). Cf. Lipsius, *Die Pilatusacten kritisch untersucht*, Kiel, 1871; Hilgenfeld in the *Zeitschrift für wissensch. Theol.*, 1865, p. 340 seq., 1871, p. 607 seq.

<sup>3</sup> Cf. *Tertull.*, *Apolog.* 5; *Euseb.*, *Hist. eccl.* ii. 2; *Braun*, *Diss. de Tiberii Christum in deorum numerum referendi consilio*. Bonn, 1834.

<sup>4</sup> Cf. *Euseb.*, *Hist. eccl.* i. 13; Phillips, *The Doctrine of Addai, the Apostle*, London, 1876; Zahn, *Götting. gelehr. Anz.*, 1877, No. 6; Nöldeke, *Lit. Centr. Blatt*, 1876, No. 29; Nestle, *Theol. Lit. Zeitung*, 1876, No. 25; 1877, No. 4.

<sup>5</sup> Cf. *Apollinaris* in *Euseb.*, *Hist. eccl.* v. 5, 4; *Tertull.*, *Apolog.* 5, *Ad. Scap.* 4; Otto, *Corpus Apologett.*, T. ix. p. 486 seq.

promise. We are able to-day, on the basis of fully authenticated records, to declare, with satisfactory certainty, that *even in the time of the Apostles the palace of the emperor was one of the chief seats of the growing Christian church in Rome.*

The New Testament makes mention of Christians at the emperor's court, and that too in an especially important passage. Not long after the arrival of the Apostle Paul in Rome, he writes to the distant church at Philippi the epistle which has received a place in our New Testament.<sup>1</sup>

The epistle closes with these words: "All the saints salute you, chiefly they that are of Cæsar's household."<sup>2</sup> The Apostle thus bears witness here that about the year 62 there were Christians at the court of Nero, and furthermore he singles them out for special mention. Why is this? Is it because he himself preached at the court? This is not very probable; for his house was near the Praetorium, a long distance from the Palatine. No! These Christians in "Cæsar's household" must have been acquainted previously with the church at Philippi. It is thus probable that the church at the court was already formed before Paul came to Rome, and that they already constituted a prominent division of the Christian community there.<sup>3</sup> This is, in fact, capable of proof. Let us look at Paul's Epistle to the Romans. It was written in the year 58 or 59, before Paul had ever been in Rome, yet at the close of this epistle he sends greetings to more than twenty persons there.<sup>4</sup>

He was personally acquainted with very many of them; so active already was the intercourse between the Christians

<sup>1</sup> The genuineness of this epistle has lately been called in question again by Holsten (*Jahrb. für protest. Theolog.*, 1875, pp. 425-495; 1876, pp. 58-165, 282-372) and Hoekstra (*Theol. Tijdschr.*, 1875, pp. 416-479). As opposed to both cf. Hilgenfeld (*Zeitsch. f. wiss. Theol.*, 1875, p. 566 seq.; 1877, p. 145 seq.).

<sup>2</sup> Chap. 4, 22.

<sup>3</sup> Cf. the careful investigations of Lightfoot (*Philipp.* pp. 1-28).

<sup>4</sup> Very many critics consider the close of this epistle as not Pauline, or at least separate it from the Epistle to the Romans. The first hypothesis (Baur, Lucht, Volkmar, and others) is unfounded; the latter (Ewald, H. Schultz, and others) rests upon noteworthy considerations. I am, however, unable to regard their reasons as convincing. Lightfoot (*Philipp.* p. 169 seq.), by a comparison of the inscriptions, and by pointing out a series of considerations hitherto unnoticed, has earned the credit of making it again very probable that the closing chapter belongs to the Epistle to the Romans.

at Rome and those in the provinces. Now, among the names we meet with several, which we find repeated in the inscriptions as names of slaves belonging to the *emperor*.

This may only be accidental. The following consideration, however, is of greater importance. Only twice in the chapter of greeting does Paul send salutations to whole classes of persons—namely, to the Christians in the household of Narcissus, and to those in the household of Aristobulus.<sup>1</sup> They must therefore have belonged to the retinue of two of the aristocracy, and it is worthy of note that, at the time of the Emperor Claudius (41–54 A.D.), no one held greater power in Rome, no one stood nearer to the person of the emperor, than a certain Narcissus; and a certain Aristobulus, grandson of Herod the Great, lived at the same time, as a trusted friend of Claudius. It is not, then, perhaps too rash to conclude that the Christians to whom the Apostle here sent greetings belonged to the retinue of these men. Narcissus and Aristobulus were already dead; but it is very possible that, as often happened in such cases, their slaves went into the palace of the emperor.<sup>2</sup>

<sup>1</sup> Rom. 16: 10, 11.

<sup>2</sup> Concerning Narcissus, the freedman and private secretary (ab epistulis) of Claudius, cf. Pauly, *Realencyklop.* T. V., p. 414. He died in the year 54 or 55. "As was usual in such cases, his household would most probably pass into the hands of the emperor, still, however, retaining the name of Narcissus. One member of this household apparently is commemorated in an extant inscription, TI. CLAUDIO. SP. F. NARCISSIANO (Murat, p. 1150, 4). These Narcissiani I suppose to be designated by St. Paul's *οἱ ἐκ τῶν Ναρκισσοῦν*" (Lightfoot, *Philipp.* p. 173). Concerning Aristobulus, see Pauly, T. I. 2, p. 1600. According to Josephus, *Antiq.* xx. 1, 2, he was still living in the year 45. The time of his death is uncertain. "The Emperor Claudius, writing at this time, speaks of Aristobulus as entertaining most dutiful and friendly sentiments toward himself. When the slaves of a household passed into the hands of a new master, by cession, or inheritance, or confiscation, they continued to be designated by the name of their former proprietor. Thus a slave whom the emperor had inherited by the will of the Galatian King Amyntas, is described as CÆSARIS. SER. AMYNTIANUS (Grut. p. 577, 5). In the same way, in the imperial household, we meet with Maecenatiani, Arippiani, Germaniciani, etc., where in like manner the names preserve the memory of their earlier masters. Now, it seems not improbable, considering the intimate relations between Claudius and Aristobulus, that at the death of the latter his servants, wholly or in part, should be transferred to the palace. . . . And as the household of Aristobulus would naturally be composed in a large measure of Jews, the gospel would the more easily be introduced to their notice" (Lightfoot, *Philipp.* p.

If, however, such testimony be considered still doubtful, we possess proof that is incontestable. An epistle has come down to us, which the Church at Rome sent to Corinth in the year 95, or a little later, by the hand of a certain *Clemens*, to settle the disturbances there. At the close of this epistle the Roman Church says, that they have made two men responsible for its delivery *who from their youth up, even to old age, have gone in and out among them blameless*—i.e., two trusty men who must have been Christians at least since the year 50. And what are their names? *Claudius Ephebus* and *Valerius Bito*.<sup>1</sup> Here it is no longer possible to doubt, *Claudius* is the name of the emperor, and the infamous *Messalina*, his wife, sprang from the “*gens Valeria*.”

These two men, therefore, belonged directly or indirectly to the household of the emperor, and there were Christians at the court of *Claudius*, a court in comparison with which that of *Louis XIV.* was virtue itself.

But still further, it was precisely from the number of these Christians that the trusty men of the Roman Church were chosen. They were Christians whose fidelity had been tested. They saw *Paul* while he was yet in Rome. Thus we see that the oldest members of the Roman Church, known to us by name, belonged to the court of the emperor. We know quite surely the general fact that there were Christians in Rome at the time of *Claudius*, from a passage in *Suetonius*, which it must be confessed is not very clear.<sup>2</sup>

But what was the position and influence of these Christians in the emperor’s palace? We do not know; but we

173). Lightfoot is right in considering it significant that directly afterward a certain *Herodian* is greeted by the Apostle.

<sup>1</sup> Cf. I. Clem. ad Cor., cap. 63,3: ἐπέμψαμεν δὲ ἄνδρας πιστοὺς καὶ σάφρονας ἀπὸ νεότητος ἀναστραφέντας ἐντὸς γῆρους ἀμέμπτως ἐν ἡμῖν, οἵτινες μάρτυρες ἔσονται μεταξὺ ἡμῶν καὶ ἡμῶν. C. 65, 1: τοὺς δὲ ἀπεταλμένους ἀφ' ἡμῶν Κλαύδιον Ἐφῆβον καὶ Οὐαλέριον Βίτωνα σὺν καὶ Φορτονύτῳ ἐν εἰρήνῃ μετὰ χαρᾶς ἐν τάχει ἀναπέμψατε πρὸς ἡμᾶς. See my commentary on these passages (*Clementis R. ad Corinthios epp.* [1876], p. lvi. pp. 106–109); Lightfoot, *S. Clement of Rome* [1869]; *Appendix* [1877], p. 177 seq., p. 255 seq.

<sup>2</sup> Sueton., *Claudius* 25: “*Judeos impulsore Chreste assidue tumultuantes Roma expulit.*” Cf. *Acts* 18: 2; for “*Chrestus*,” *Tertull.*, *Apolog.* 3; *Lactant.*, *Inst. Div.* iv. 7; *Justin.*, *Apolog.* i. 4. The name occurs also on a heathen Latin inscription. Cf. *Corp. Inscr. Lat.* T. vi. p. i., No. 880–975.

have reason to suppose that they belonged to the lowest grade. Paul in the Second Epistle to Timothy writes, that no one stood by him at his trial.<sup>1</sup> We have, however, some evidences, though indeed of an uncertain nature, that even in Nero's time Christianity had won a place in a few families of the nobility. If I see correctly, there are four considerations which deserve notice in this connection:

*First:* There seems to have existed a common belief in the church in the fourth century, that Nero's teacher, Seneca, was converted by Paul, and there was indeed in this century a correspondence in existence reputed to have been that between Seneca and the Apostle. Augustine, for example, did not doubt the genuineness of these letters.<sup>2</sup>

Jerome was more cautious, but he even did not hesitate to include Seneca in his history of Christian literature.<sup>3</sup> Who then was Seneca, the philosopher of the court? A very noteworthy character! He had all the qualities which would have made him one of the most famous men of all times; a wide range of knowledge, quick intuitions, political ability, a deep insight into human nature, its motives, passions, and faults. He possessed a strong bias for the noble and the good. He was acquainted in an uncommon degree with the means by which salvation could come to a lost world. He uttered the most excellent maxims, wrote confessions and exhortations of the most affecting truth, and for this very reason the Christians claimed him as their own. It was not possible to believe that such a man was a heathen. And yet we must reckon Seneca, the teacher of a Nero, as the saddest and most pitiable figure which history has left us. His life was not stamped

<sup>1</sup> 2 Tim. 4:16. This passage may safely be regarded as without doubt Pauline.

<sup>2</sup> Epist. cliii. 14: "Seneca cuius quædam ad Paulum apostolum leguntur epistulæ." But it is not known whether Augustine himself read the letters.

<sup>3</sup> Cf. Hieron., *De vir. ill.* 12; *Adv. Jovin.* i. 49: "noster Seneca." These letters were finally published by Haase (opp. *Seneca*, T. iii. p. 476 seq.). They exist in perhaps a hundred manuscripts. Cf. also Fleury, *St. Paul et Sénèque* (1853), T. ii. p. 300 seq.; Aubertin, *Etud. crit. sur les rapports supposés entre Sénèque et St. Paul* (1857), p. 409 seq.; Kraus, *Der Briefwechsel Pauli mit Seneca* (*Tübing. Theol. Quartalschr.*, 1867, p. 607 seq.); Lightfoot, "The Letters of Paul and Seneca" (*Ep. to the Philipp.* p. 327 seq.). Pseudolinus also (see above, note 46) presupposes the Christianity of Seneca.

with his many noble qualities and talents, but by vanity and lack of principle. He himself allowed dust and mould to gather upon the gold of his intellect and his lofty ideals.

In Nero's court this genius not only stooped to heartless sentiment, but also to vice and sin. Is it with such a man Paul is said to have had intercourse? Is it true that he himself cherished a kind of Nicodemus-Christianity? This would not be so entirely impossible, especially when we remember that Paul had become acquainted with the brother of Seneca in Corinth, where he was proconsul, and had shown himself friendly to the Apostle.<sup>1</sup> It may be mentioned further in this connection that an epitaph, belonging indeed to the third century, was found in Ostia, which reads thus: Annæo. Paulo. Petro. Annæus. Paulus.<sup>2</sup> There were therefore members of the "gens Annæa" in the third century, who were Christians, and who adopted by preference the name Paulus. Seneca also belonged to the "gens Annæa," and this fact is not unimportant. But, on the other hand, it must not be forgotten that Tertullian, living in the second century, makes no mention of Seneca's Christianity, though he cites him several times in his writings.<sup>3</sup> Tertullian was, however, in Rome, and everywhere rests his historical statements upon the tradition of the Roman Church.<sup>4</sup> To this must be added that Seneca spoke of Judaism in a manner hardly to be expected of a man renowned for Christianity.<sup>5</sup> Therefore, in spite of striking similarities

<sup>1</sup> So at least we learn in *Acts* 18, 12 f.

<sup>2</sup> Cf. De Rossi in the *Bullett. di archeol. crist.*, 1867, p. 6: DM. M. ANNEO. PAULO. PETRO. M. ANNEVS. PAULVS. FILIO. CARISSIMO. Cf. also Friedländer, *ibid.*, vol. iii. p. 535; Renan, *Antichrist*, p. 9 seq., note 4; Lightfoot, *ibid.*, p. 298, note 5. The incorrect combinations of De Rossi concerning the consulate of Seneca (*Bullett.*, 1866, p. 60, 62) have already been refuted by Renan and Friedländer in the above-mentioned works.

<sup>3</sup> Cf. Tertull., *De anima*, 20: "Seneca sapientia nostra." *De resurr. carnis* 1 *Apolog.* 12, 50.

<sup>4</sup> Naturally the Carthaginian Church possessed only derived traditions. Tertull., *De prescr. hær.* 36: "Habes Romam unde nobis quoque auctoritas praesto est." This statement is of very wide application. Tertullian's accounts of the history of heresies and the origin of the N. T. writings may be traced back to the Roman traditions.

<sup>5</sup> Renan also, in the above-mentioned work, rightly lays stress upon this point. Cf. Augustine, *De civitat. dei*, vi. 11.

between the sentiments of Paul and Seneca, we must regard the personal acquaintance of the two men and the Christianity of Seneca as very improbable.<sup>1</sup>

Hardly more probable, in the second place, is that account according to which not only many high-ranked officers of the palace, but also a wife of Nero, Livia, were converted by Peter and Paul. This story is found in a comparatively early apocryphal history of the apostles. Still it can be shown that even these converted members of the emperor's household formed a regular part in the make-up of the apocryphal history of the apostles.<sup>2</sup> It is necessary, therefore, to be doubly on our guard.

The supposition has been advanced of late that Acte, Nero's favorite female slave, was friendly to Christianity. It is somewhat surprising that among her attendants persons are mentioned with the names Onesimus, Stephanus, Phoebe, Crescens, Artemas.<sup>3</sup> These names are known to us from the New Testament; still nothing can be made of this fact.

On the other hand—and this is of more importance—we may now regard it an established fact that a woman of very high rank, closely related to the court, Pomponia Græcina, the wife of the consul Plautius, conqueror of the Britanni, was a Chris-

<sup>1</sup> Much has been written, both in ancient and modern times, upon the relations between Seneca and Paul. Cf. Fleury in the above work (where also the older literature may be found), Aubertin, *Martha (Les Moralistes sous l'empire Romain, 2 edit. 1866)*, Baur (*Zeitschr. f. wiss. Theol.*, 1858, p. 161 seq.), Zeller, Schiller, B. Bauer. The essays of Lightfoot (*ibid.*, pp. 268–331) and Boissier (*La religion Romaine*, etc., T. ii. pp. 52–104) are especially excellent. Friedländer arrives at the same conclusion as myself respecting the relations between Paul and Seneca.

<sup>2</sup> Cf. the Pseudo-Clementine writings, the *Acts of Peter and Paul*, cap. 4, 31, 36 seq., 84, the *Acts of Pseudolinus*, the *Acta Barnabæ auctore Marco* (cap. 23, Ἰεζονσαῖος, συγγενῆς Νερῶνος). We must come to a different conclusion concerning the *Acta Pauli et Thecle*, cap. 36 (see below, note 76). The account of the conversion of Livia is found in *Acta Petr. et Pauli*, 31.

<sup>3</sup> Concerning Acte cf. Tacit., *Annal.* xiii. 12, 46, xiv. 2; Sueton., *Nero*, 28; Cassius Dio, lxi. 7. For inscriptions, see *Fabretti*, pp. 124–126; *Orelli*, No. 735, 2885; *Henzen*, No. 5412, 5413 (Renan, *Antichrist*, p. 106, note 5). When Renan (p. 106) says: "Acte belonged at first to the gens Annæa, around which, as we have seen, the earliest Christians moved and became gathered," he forgot that on p. 9 seq. he explained a reference of Paul to Seneca as improbable. Also the statement, "Acte was not indeed a Christian, but she did not fall far short of it," is without proof. Friedländer, *ibid.*, vol. i. p. 116, is rightly silent about the Christianity of Acte.

tian. Tacitus<sup>1</sup> indeed only relates<sup>2</sup> that in the year 58 she was indicted for holding foreign superstitions, and was acquitted by her husband. After this she spent forty years occupied in a kind of gloomy religion, and in deep depression of spirit. By this might have been meant Christianity. Still further, the talented explorer of the catacombs, De Rossi, not only discovered Christian inscriptions from the beginning of the third or the end of the second century, with the title, "Pomponius Bassus;" but also in the sepulchre of St. Lucina, in S. Callisto, he found an inscription of the same age, bearing the title, "Pomponius Græcinus."<sup>3</sup> We may therefore consider the Christian standing of Pomponia Græcina as established, and she is thus the first Christian woman of high birth of whom we know<sup>4</sup> at Rome.

But once more; we have a very old Christian story, entitled "The Acts of Paul and Thecla;" a small but very interesting book, written in all probability in the second half of the second century, and without doubt resting upon historical accounts.<sup>5</sup> In this book we have the story of the martyrdom of Thecla, a disciple of Paul, at Antioch in Asia Minor. It is quite incidentally mentioned in the account that the queen Tryphæna had given the poor girl a very friendly reception. Tryphæna was said to be a relative of the emperor.

<sup>1</sup> Onesimus: *Coloss.* 4: 9, *Philem.* 10; Stephanus: *Acts* 6: 5 seq.; Phœbe: *Rom.* 16: 1; Crescens: *2 Tim.* 4: 10; Artemas: *Tit.* 3: 12. Besides these, the names Claudia, Felicula, Helpis, Thallus.

<sup>2</sup> Tacit., *Annal.* xiii. 32: "Nam post Julianam Drusum filiam dolo Messalinæ interfactam (thus Tacitus explains the following) per quadraginta annos non cultu nisi lugubri, non animo nisi mæsto egit; idque illi imperitante Claudio impune, mox ad gloriam vertit."

<sup>3</sup> Cf. De Rossi, *Roma Sotterr.* T. ii. pp. 362 seq., 728, Tab. ii.-l. No. 27: Πομπονίας Γραικίνας. Cf. Tab. xli., No. 48.

<sup>4</sup> Cf. Friedländer, "De Pomponia Græcina superstitionis externæ rea." Regimonti, 1863. Later, on the ground of De Rossi's discovery, Friedländer changed his opinion. Cf. "Sittengeschichte," T. i. p. 490 seq., T. iii. p. 534; Wandinger, "Pomponia Græcina," Freisingen, 1873; Caspary, *Quellen*, vol. iii. p. 281 seq.; Kraus, *Roma Sotterr.* pp. 44, 127; Renan, *Antichrist*, p. 2 seq.; Lightfoot, *Philip.* p. 21. It is true that De Rossi has not proved that S. Lucina is identical with Pomponia Græcina.

<sup>5</sup> Printed in Grabe, *Spicileg. SS. Patr.* (Oxon. 1698), T. i. p. 87 seq., 330 seq. Tischendorf, *Acta App. Apocr.* p. 40 seq. Schlau, *Die Acten des Paulus und der Thecla* (Leipzig, 1877), and Zahn in the *Gött. gelehrt. Anz.* 1877, p. 1307 seq.

This was considered a mere fable; but we are now informed on this subject that, about the middle of the first century, a certain king Polemon in Asia Minor had a wife named Tryphæna, and that she was related to the Emperor Claudius.<sup>1</sup> We have her portrait to-day upon a coin.<sup>2</sup> It is true this royal princess lived far from Rome, and it is impossible to separate history from tradition in this account.

In the summer of 64 the frightful conflagration in Rome broke out, and close upon its heels came the terrible persecution of the Christians by Nero, who pointed at the Christians as the incendiaries.<sup>3</sup> We do not know whether the Jews at the court had suggested this idea to him,<sup>4</sup> or whether he had conceived it himself. Perhaps he had heard that the Christians were expecting a general conflagration of the world, and made this his pretext.<sup>5</sup>

Tacitus, however, who was hostile to the Christians, frankly confesses that investigation<sup>6</sup> did not cast even a shadow of blame upon them; and yet they were massacred.

Even in the year 95, the Church at Rome writes: "Our women are forced to endure dreadful and outrageous torments."<sup>7</sup> They were used for those ghastly spectacles which Nero caused to be represented. The reflection of the conflagration of Rome and of the bloody persecutions is clearly recognizable in the revelation of John. Nero appears as Antichrist; his speedy return at the end of the world is awaited.<sup>8</sup> Other-

<sup>1</sup> Cf. v. Gutschmid, *Rhein. Museum*, 1864, p. 176 seq.; Schlau, p. 88 seq.

<sup>2</sup> Cf. v. Gutschmid.

<sup>3</sup> Cf. Tacit., *Annal.* xv. 44; 1 Clem. *ad cor.* 6. Probably Heb. 10: 33 belongs here.

<sup>4</sup> This is not entirely unlikely; cf. Renan, *Antichrist*, p. 124 seq. Concerning the fanaticism of the Jews against the Christians, cf. my notes on *Papias*, *Frags.* xi. (*Patr. App. Opp.*, Fasc. I., 2 [edit. II., 1878]).

<sup>5</sup> Notice the frame of mind in which the revelation of John was written. *Cæcil. ap. Minuc. Felix*, *octav.* xi. 1: "Quid? quod toto orbi et ipsi mundo cum sideribus suis minantur incendium, ruinam moluntur." *Tertull.*, *Apolo-* *g. 37.* *Tacit. I.c.*, "Odio humani generis convicti sunt." Renan, p. 122 seq.

<sup>6</sup> A real procedure took place. The government already made a distinction between Jews and Christians. On this point, cf. Weizsäcker in the *Jahrb. f. deutsche Theol.* 1876, p. 266 seq. (opposed to Schiller's representation).

<sup>7</sup> Cf. 1 Clem. *ad cor.* 6, 2, and my comment on this passage (*Patr. App. Opp.*, Fasc. I., 1 [edit. II., 1878]).

<sup>8</sup> In subsequent time, other emperors, probably also Domitian and Septi-

wise, however, a dark mystery veils these days of persecution, in which it is probable that Paul and Peter met a martyr's death,<sup>1</sup> and also over the entire following period of thirty years.<sup>2</sup> Undoubtedly there was the most suffering among the Christians at the court. The distinction between Judaism and Christianity had now indeed become clear, even to the emperors.

It is not until the closing years of Domitian's reign (81-96 A.D.) that further information concerning the Christians in the palace comes down to us. In the first place, a very old and remarkable account by Hegesippus, a Christian writer, who wrote a great historical work about eighty to ninety years after the time of Domitian. He tells us that the emperor, alarmed at the prospect of a future Messianic kingdom, instituted a search in Palestine for the descendants of David. Two grand-nephews of Jesus were informed against as such, and were brought before the emperor, at Rome. In answer to his inquiries, they explained to him that the kingdom of Christ was not an earthly, but a heavenly kingdom. They also showed him their callous hands, in proof that they were peaceful laborers, and told him they possessed nothing except a piece of land worth \$1125. Thereupon the emperor's anxiety was relieved, and he released them, and discontinued the persecutions. So runs the record.<sup>3</sup>

It is easy to see that this account is not very trustworthy; indeed, its conclusion is absolutely false, for Domitian never

mius Severus (the writer Judas, as quoted by Euseb., *Hist. eccl.* vi. 7), were regarded as Antichrists. Cf. the Sibylline Books.

<sup>1</sup> This is only a supposition, but, as it seems to me, quite a probable one. Cf. my notes to *I Clem.* 5, 6, and the literature cited there.

<sup>2</sup> We know absolutely nothing positive concerning the relations of Vespasian and Titus to Christianity. Eusebius (*Hist. eccl.* iii. 17) expressly says that Vespasian took no measures against the Christians (*μηδὲν καθ' ήμῶν ἀποτον*). Concerning the supposed persecutions by Vespasian, cf. Aubé's *Hist. des persécut. (1876)* p. 142. An interesting statement is given in the *Chronic. pasch.* (edid. Dindorf, pp. 460, 7 seq.): *ἐπὶ τούτων τῶν ὑπάτων ταφῆ παρεδόθη τὰ σώματα τῶν ἀγίων ἀποστόλων κατὰ κέλευστν Οὐεσπασιανοῦ τοῦ βασιλέως ἐν ὁράματι γὰρ ἐκελεύθη δοῦναι ταφῆ τὰ σώματα τῶν ἀγίων ἀποστόλων.*

<sup>3</sup> Cf. Hegesippus in Euseb., *Hist. eccl.* iii. 20. Hegesippus has also given us similar information (Euseb., *Hist. eccl.* iii. 12) concerning the inquiries of Vespasian in respect to the descendants of David.

proclaimed any edict of amnesty.<sup>1</sup> What dependence we can place upon it—and we are warranted in supposing it rests upon historical foundation of some sort—it is not possible to estimate.

But we have a much more important record, pertaining to the time of Domitian, which has in later years gained considerable credence. Dio Cassius and Suetonius tell us that Domitian, in the beginning of 96, caused his cousin-german, T. Flavius Clemens (consul in 95), to be put to death on account of his leaning toward Judaistic customs and atheism, and also on account of most disgraceful inactivity.<sup>2</sup>

According to Dio Cassius, this Clemens was married to a certain Fl. Domitilla, who is regarded by some scholars to have been the daughter of Clemens' cousin Domitilla, the sister of Domitian. The emperor caused her also to be seized and banished to the island Pandateria. According to Eusebius, however, this Domitilla was not the sister but the niece of T. Flavius Clemens, and was banished to the island Pontia.<sup>3</sup> She

<sup>1</sup> Besides Hegesippus (l. c. iii. 20, 7), this is also maintained by Tertullian (*Apolog.* 5). It is, however, quite improbable. See *Cassius Dio*, lxviii. 1; *Lactant.*, *De mort. persec.* 3.

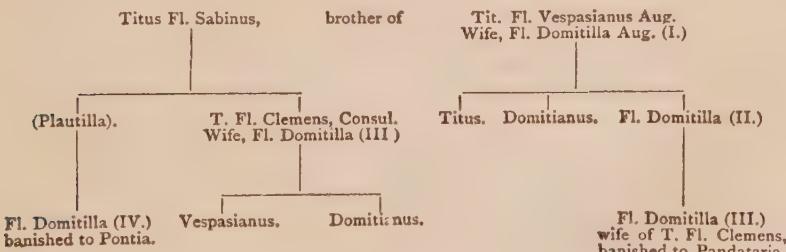
<sup>2</sup> *Cassius Dio*, lxvii. 14: καὶ ἐν τῷ αὐτῷ ἐτεὶ ἀλλοὺς τε πολλοὺς καὶ τὸν Φλάβιον Κλήμεντα ὑπατεύοντα, καὶ περ ἀνεψιὸν ὅντα καὶ γυναικαὶ αὐτὸν συγγενῆ ἔστοι Φλαβίαν Δομιτίλλαν ἔχοντα, κατέσφαξεν δὲ Δομετίανός, ἐπηνέχθη δὲ ἀμφοίν ἐγκλημα ἀθέτητος, οὐδὲ τὸν Κλήμεντα ἔθη ἐξοκείλοντες πολλοὶ κατεδικισθησαν, καὶ οἱ μὲν ἀπέθανον, οἱ δὲ τῶν γοῦν οὐσιῶν ἐστηρίθησαν ἡ δὲ Δομιτίλλα ὑπερωρίσθη μόνον ἐς Πανδατερίαν. Sueton., *Domit.* 15: "Denique Flavium Clementem, patreulem suum, *contemptissimam inertiae* . . . . . repente ex tenuissima suspitione tantum non ipso eius consulatu intererit." Concerning the condemning to death of numerous (Christian?) persons of high rank, cf. Euseb., *Hist. eccl.* iii. 17; Brutius in Euseb., *Hist. eccl.* iii. 18, 5.

<sup>3</sup> Unfortunately the family connections of Domitilla cannot be settled with any degree of certainty. Eusebius, in his *Church History* (iii. 18, 4 seq.), basing his account on the testimony of non-Christian writers (*οἱ ἀποθεὸν τοῦ καθ' ἡμάς λόγον συγγράφεις*), relates that, in the fifteenth year of Domitian's reign, among many others, Flavia Domitilla, a niece of the consul Flavius Clemens, was banished to the island Pontia on account of her Christian confession. In the Chronicle (Arm.) we read, *post Domit ann. 14 = 2110 p. Abrah.*: "Refert autem Brettius, multos Christianorum sub Domitiano subiisse martyrium; Flavia vero Domitilla et Flavus Clementis consulis sororis filius, in insulam Pontiam fugit, quia se Christianum esse professus est." These senseless words can easily be amended from Jerome, the statements of Eusebius in his *Church History*, and Syncellus (edit. Bonn, i. 650): *Flavia vero Domitilla Flavii Clementis consulis sororis filia in insulam Pontiam fugit, quia se Christianam esse professa est* (cf. Joh. Malalas, *Chronogr.* p. 262). From the fearfully

was the grand-daughter or great-grand-daughter of Vespasian, and probably was the mother of the two princes

distorted words: πολλοὺς δὲ ἄλλους Χριστιανοὺς ἐτιμωρήσατο, ὥστε φυγεῖν ἐξ αὐτῶν πλῆθος ἐπὶ τὸν Πόντον [sic] καθὼς Βώττιος [sic] ὁ σοφὸς χρονογράφος συνεγράφατο καὶ αὐτῶν, we may arrive approximately at what has been handed down to us). It is very probable that this notice of the Roman writer Bruttius stood at the outset in the Chronicle of Julius Africanus, and thence found its way into the other chronographies (cf. also the *Chron. Pasch.*, edit. Bonn, i. p. 468), partly through the mediation of Eusebius, partly direct (cf. v. Gutschmid, as quoted by Lipsius, *Chronol. der römischen Bischöfe* [1869], p. 154, note 3). It is unnecessary to suppose that Eusebius himself examined the work of Bruttius. It follows from this that Bruttius lived at any rate before the year 221. Lightfoot (*Ep. to the Philipp.*, p. 22, note), Kraus (*Roma Sotterr.*, p. 44), and others identify him with the Bruttius referred to by Pliny (*Epist. vii. 3*), (cf. Pauly, *Realencyklop.*, T. i. 2, p. 2503); but this is not certain. It is also possible that he was the son of the C. Bruttius Præsens, the father-in-law of Commodus (Pauly, *ibid.*, p. 2503, seq.) or an unknown third person.

It is worthy of notice that the name Bruttius was found in the burial-place of St. Domitilla. De Rossi, who discovered several inscriptions pertaining to the "gens Bruttia" in St. Domitilla, is of the opinion that the Bruttii had their places of burial near those of the Flavii, and that perhaps this very circumstance directed the attention of the heathen writers to the fate of Flavia Domitilla (Kraus, *ibid.*, p. 44). The theory of Volkmar (*Theol. Jahrb.*, 1856, p. 301) that Bruttius was a Christian writer of the third century, has already been sufficiently refuted by Zahn (*Hirt des Hermas* [1868], p. 53 seq.). On the other hand, in opposition to Zahn (*ibid.*, p. 55 seq.) and to my earlier view (*Clementis epp.*, ad Cor. [1876], p. Ixiii., note 5), this must be regarded as settled, that the notice respecting Flavia Domitilla stood already in the work of Bruttius. This clearly follows from Euseb., *Hist. eccl.* iii. 18. Thus the statement of Dio Cassius that Flavia Domitilla was the wife of Fl. Clemens and was banished to the island of Pandataria, and that of Bruttius, that she was the niece of Fl. Clemens and was banished to the island of Pontia, stand in direct contradiction to each other. Finally, Philostratus (*Vit. Apoll.* viii. 25) calls the wife of Clemens a sister of the emperor. For this reason, De Rossi (*Bullett.*, 1865, p. 21), Kraus (*Roma Sotterr.* p. 41 seq.), and others, e.g., Tillemont (*Mémoir.* edit. ii., T. ii., p. 124), have considered that there were two Domitillas. De Rossi gives the following genealogy:

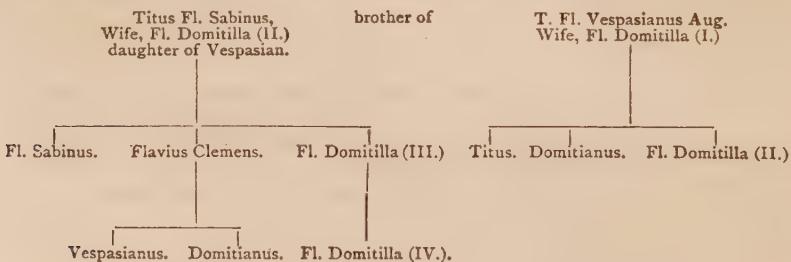


whom Domitian had once shown as heirs apparent to the throne.<sup>1</sup>

There is no longer any doubt that she was a Christian.<sup>2</sup> The great catacomb of Domitilla in Rome was discovered very near that of Callisto, and is perhaps the oldest and most interesting in the city. The following inscription occurs frequently: EX. INDULGENTIA. FLAVIÆ. DOMITILLÆ.

What a change! Between fifty and sixty years after Christianity reached Rome, a daughter of the emperor embraces the faith, and thirty years after the fearful persecutions under Nero,

This genealogy is, however, entirely doubtful, just as it is altogether improbable that the two Domitillas who were banished were two different persons. Lightfoot (*ibid.*, p. 22, note) and others consider that the error rests with Eusebius, and that Cassius Dio is right. Zahn also (*ibid.*, p. 49 seq.) follows the opinion of Cassius Dio, and calls attention to the fact that the islands Pontia and Pandataria lie very near each other, and so could very easily be mistaken one for the other. Zahn (*ibid.*, p. 47) considers it also probable that the second Domitilla was married to Arretinus Clemens, and that the fourth Domitilla was not a niece but a daughter of T. Fl. Clemens and the third Domitilla, and was married to T. Festus Onesimus (concerning her the inscription in *Gruter*, p. ccxlv., note 5). By the first supposition may be explained also the statement of Philostratus, who only confounded Arretinus Clemens with T. Fl. Clemens, consul in 95. But we have no reason to put more confidence in Xiphilinus (Cassius Dio) than in Eusebius (Bruttius). Mommsen, in his comment on the above-mentioned inscription (*Corp. Inscr. Lat.*, T. vi. p. i., No. 948), presents the following genealogy:



This genealogical table is just as probable as that of De Rossi (Zahn), and in view of the fact that Bruttius is the oldest voucher for it, it appears to be worthy of even more confidence. The banished Christian woman would probably in that case be the fourth Domitilla. Concerning her family connections, cf. also Lipsius, *Chronol. d. röm. Bishöfe*, p. 152 seq.; Friedländer, *ibid.*, vol. i. p. 492; Caspari, *ibid.*, vol. iii. p. 283. Caspari appears to distinguish the Domitilla of Eusebius from that of Cassius Dio.

<sup>1</sup> Cf. Sueton., *Domitian*, 15.

<sup>2</sup> Bruttius bears testimony to this directly; Cassius Dio indirectly.

the presumptive heirs to the throne were brought up in a Christian house! For also the husband or uncle of Domitilla (consul in 95) was without doubt a Christian. The charges made against him are the same which gave rise to the sweeping edicts against the Christians.<sup>1</sup> The excavations which have been made within a few years in the catacomb of Domitilla have established this fact beyond a doubt. They inform us that an entire branch of the Flavian family embraced the Christian faith.<sup>2</sup> We read there of a certain Tatia, who is thus described: [NV]TRIX. SEPTEM. LIB[ERORVM]. DIVI. VESPASIAN[I]. [ET]. FLAVIÆ. DOMITIL[LÆ]. VESPASIANI. NEPTIS. Another inscription reads: . . . FILIA. FLAVIÆ. DOMITILLÆ. . . . [VESPA]SIANI. NEPTIS. FECIT. GLVCERÆ. L. ET. . . . [POST]ERISQVE. EORVM.

An epitaph of a certain Flavius Sabinus is there. But this was the name, for example, of the father of the consul Clemens, etc.

But may we not venture to go a step further? One of the most illustrious presbyters of the Church at Rome in Domitian's time was named Clement.<sup>3</sup>

He is the same one who wrote the above-mentioned and still extant letter to the Corinthian Church, in the name of the Church at Rome. Is it not perhaps true that this presbyter is the same person as the consul, and that we thus possess in

<sup>1</sup> The majority of investigators now consider that the consul T. F. Clemens was condemned to death on account of his Christian belief; thus of the older school, Gibbon and Baur; of the later, Lipsius, Hilgenfeld, Caspari, Lightfoot, De Rossi, Kraus, Friedländer, and many others.

Only Graetz (*Gesch. der Juden*, 1866, pp. 112, 435 seq.) regards him a Jewish proselyte. Zahn (*Hirt des Hermas*, p. 50, seq.) agrees with him. Aubé gives his opinion cautiously and indefinitely (*ibid.*, pp. 168 seq., 182 seq.). Sycellus was the first to make express mention of the consul Clemens as a Christian (i. p. 650: *αὐτὸς δὲ Κλήμης ὑπὲρ Χριστοῦ ἀναρεῖται*). Does this notice, in spite of Eusebius, perhaps come from Bruttius through the medium of Julius Africanus? This is not probable.

<sup>2</sup> Cf. De Rossi, *Bullett.*, 1865, pp. 17 seq., 33 seq., 39; 1874, pp. 5 seq., 68 seq., 122 seq.; 1875, pp. 5 seq., 46 seq. Lightfoot, *St. Clement of Rome*, Appendix, p. 257 seq. As for the rest, no account is to be made of the apocryphal acts of Neurus and Achilles.

<sup>3</sup> Cf. Iren. iii. 3, 3.

this writing the record of a consul belonging to the imperial family?

In the first place, the contents of the letter offer nothing in opposition to this view. We have no document of the early Church, which—to speak briefly—was written in such a truly noble tone. It admonishes the Corinthians, in strong and emphatic language, to restore to order the disturbed condition of the Church. It holds up as an example “our” (*i.e.*, the Roman) legions.<sup>1</sup> It is an expression of that manly eloquence which has its basis in the energy of a noble mind and in the stability of a well-developed character. Had the Church of Rome always spoken in the same tone as this, it would never have lost its moral supremacy in Christendom. At all events, this writing shows that here a church speaks which is not only strongly united by an inward bond, but also one which has culture and authority in its midst. The epistle would not indeed be unworthy of a Roman consul. And it is worthy of notice that the Jewish-Christian partisan romance which we possess in the form of the Clementine homilies and recognitions emphatically declares this Roman presbyter and epistle-writer to be a relative of the emperor.<sup>2</sup>

Still we shall be obliged to desist from forming those alluring combinations which some scholars of to-day favor, and this for two reasons: 1st. The entire tradition of the Church, so far as it bears upon this subject, not only furnishes no evidence that the presbyter was a consul, but also leaves no account of a martyrdom of the presbyter.<sup>3</sup> 2d. The writer of this letter

<sup>1</sup> Cf. 1 Clem. ad Cor. 37, 2 (55, 2).

<sup>2</sup> This point was mentioned by Cotelerius, Hilgenfeld (*Apostolische Väter*, 1853, p. 297), and Lipsius (*ibid.*, p. 153 seq.), have given special weight; cf. the Prolegg. to my edition of Clement's letters, edit. ii., p. 62 seq. In the Pseudo-Clementina, Clemens, the Bishop of Rome, is related to the imperial family on his father's and mother's side—with the house of Tiberius, however; for the romance was at work in his day.

In general, Hilgenfeld and Lipsius place the time too early at which the romance, as we have it, was composed. We cannot trace it to a period earlier than the beginning of the third century. This is proved by the names of the royal families which are not Julian or Flavian, but Antonine.

<sup>3</sup> In regard to the first point, the tradition that Bishop Clement was an imperial prince is not mentioned at all outside the Pseudo-Clementina. As touching the martyrdom of the presbyter-bishop, the silence of Irenæus,

shows such an intimate knowledge of the Old Testament as we should scarcely expect to find in a prince of the royal family.<sup>1</sup> This settles the question.<sup>2</sup> Consul and presbyter are two different persons. But the presbyter, as his name indicates, seems to have belonged to the court; not indeed as a prince, but as a slave or as a freedman.<sup>3</sup> It remains, however, after all, probable that the epistle as we now read it was also read and approved by the consul T. Flavius Clemens before it was sent.<sup>4</sup>

Still one dark shadow remains to be removed. The terrible Domitian was murdered in 96 by a servant of the banished Domitilla, named Stephanus. One writer relates that he did this to avenge his mistress. Is it probable that he too was a Christian? This has been supposed, but it is a mere hypothesis, resting upon no recorded proof.<sup>5</sup> So much, however, we know; the Church which wrote the epistle to Corinth, which

Eusebius, and Hieronymus is sufficient to throw doubt upon its credibility. Rufinus is the first to mention it (opp. Hieron. edid. Valarsi, ii. p. 507). Zosimus and others follow him.

<sup>1</sup> Lightfoot has attached especial importance to this point (Appen. p. 263 seq.).

<sup>2</sup> The following writers maintain that they were identical: Volkmar (*Theol. Jahr.*, 1856, p. 304), Hilgenfeld (*Clementis epp.* [edit. ii., 1876], p. 32 seq.; *Zeitschr. cf. wiss. Theol.*, 1869, p. 232 seq.); with greater caution, Lipsius (*ibid.*, p. 153 seq.). I myself have given too much probability to this hypothesis (*Clementis epp.* [edit. ii., 1876], p. 63). Cf. Zahn (*ibid.*, p. 153 seq.), Lightfoot (*ibid.*), Caspari (*ibid.*, vol. iii., p. 293 seq., note 41), and others. Also De Rossi and Kraus distinguished both. They consider it, however, possible that the presbyter-bishop was at all events a relative of the royal family, perhaps a nephew of the consul.

<sup>3</sup> So Lightfoot (*ibid.*) He further holds it probable that the presbyter-bishop was of Jewish extraction. This hypothesis had been advanced before by Tillemont, Venema, Schliemann, Gundert, and others. I cannot regard it as convincing.

<sup>4</sup> It may be remarked in passing that De Rossi's hypothesis (*Bullett.*, 1865, p. 21), that also Acilius Glabrio, consul in 91, and who was condemned at the same time with Fl. Clemens, was a Christian, is unfounded. The same is true of his interpretation of Tacitus, *Agricola*, 45. Cf. as opposed to him, Friedländer (*ibid.*, vol. iii. p. 534, n. 5), Caspari (*ibid.*, p. 284, n. 24). Also Aubé (*ibid.*, p. 163 seq.) has no ground for associating Domitilla and Clement with Glabrio.

<sup>5</sup> Concerning the death of Domitian and the connection of Stephanus with it, cf. Sueton., *Domit.* 15, 17; *Cassius Dio*, lxvii. 15-17; *Philostrat. Vit. Apollon.* viii. 25. Only the statements of the latter give occasion for the above-mentioned combinations. Cf. Keim in *Herzog's Realencykl.* vol. x., p. 277. In opposition to him, Zahn, *ibid.*, p. 45. Aubé (*ibid.*, p. 183 seq.) gives opinions similar to those of Keim.

closes with a prayer for the rulers, would have recoiled from such a crime and have excommunicated the murderer—and this Church was the one at Rome.<sup>1</sup>

The Christian faith in the family of the Flavian emperors—we must here be on our guard against a disposition to estimate from this fact the spread of Christianity in Rome. Almost a hundred years still pass by before the Christian faith effectually penetrates the higher grades of society.

The above fact touching the imperial family is an exception which it will repay us to notice. During the reigns of the four best emperors that Rome ever saw, Trajan, Hadrian, Antoninus Pius, and Marcus Aurelius, covering a period of eighty-two years (98–180), Christianity still remained quite unknown to the grand world, the upper classes. After Trajan's time, indeed, it was forbidden throughout the empire on pain of death;<sup>2</sup> but the testimony of Roman writers on friendly terms with the emperors makes it clear that its true nature was as good as unknown at the court.<sup>3</sup> Those frightful charges against the Christians, invented by the rabble, respecting the eating of human flesh, and respecting incest, were believed and repeated at the court.<sup>4</sup> “New and criminal superstition,” “stubborn stiffneckedness,” “disgraceful indolence,” “hatred of mankind”—these and similar expressions were the titles with which the Christians were designated. “It has broken out also in Rome,” writes Tacitus, the friend of Trajan, “where, indeed, every thing that is disgraceful and barefaced has flowed in from all quarters, and meets with honor.”<sup>5</sup> Pliny, in a letter to the emperor, compares the extension of Christianity to the spread-

<sup>1</sup> Concerning those supposed to have suffered martyrdom in the time of Domitian, cf. Aubé, *ibid.*, pp. 177 seq., 430 seq. For the Domitian-John legend, see above, p. 18 note.

<sup>2</sup> Cf. Plin. *et Trajani* epp. 96, 97. Even Hegesippus (in Euseb., *Hist. eccl.* iii., 20, 8) betrays the consciousness that Trajan was the first to break again the peace of the Church.

<sup>3</sup> The Satirists up to the time of Lucian seem to have ignored Christianity; at least Juvenal, Martial, and the rest make no mention of it.

<sup>4</sup> Proofs in what follows.

<sup>5</sup> *Annal.* xv. 44. Also: “per flagitia invisos,” “exitibilis superstitionis,” “odium humani generis,” “adversus sontes et novissima exempla meritos.”

ing of a contagious disease.<sup>1</sup> Suetonius calls it a strange and wicked superstition.<sup>2</sup> The greatest ignorance is also shown in this connection. Thus, Suetonius, who also stood in intimate relations with the emperor, seems to have believed that Christ appeared in Rome at the time of Claudius.<sup>3</sup> Tacitus, it is true, was better informed; but even he considered the name "Christiani" as a term of mockery given by the heathen rabble, and gives a very confused account respecting the extension of Christianity. Phlegon, a freedman of Hadrian, who wrote a work entitled *Chronicles of the World* ('Ολυμπιάδες), shows himself informed, though superficially, concerning the life and miracles of Jesus, but seems therein to have confounded Christ with Peter.<sup>4</sup>

Fronto, the celebrated philosopher, teacher of Marcus Aurelius, still repeats the revolting stories of the masses hostile to Christianity; how, for example, the Christians practice shameless rites, such as offering prayer to the cross, to a crucified effigy with the head of an ass, to the pudenda of their priests, etc.<sup>5</sup>

We see in what estimation Christianity was still held at the court of Marcus Aurelius from the Christian Apologies of Minucius Felix and Tertullian, which are directly based upon the judgments at the court. The heathen Cæcilius, in the Dialogue of Minucius, as also his appeal to Fronto shows, expresses those views which were rife at that time in the imperial palace.<sup>6</sup>

<sup>1</sup> Ibid.: "pertinacia et inflexibilis obstinatio," "amentia," "crimen," "supersticio prava immodica," "neque civitates tantum sed vicos etiam atque agros superstitionis istius contagio pervagata est."

<sup>2</sup> Sueton., *Nero*, 16: "supersticio nova ac malefica."

<sup>3</sup> Sueton., *Claudius*, 25.

<sup>4</sup> Cf. Origenes c. Cels., ii. 14. The Annals of Phlegon were used by Julius Africanus and Eusebius. It is probable that only the former used them directly. Only small fragments are still extant. Cf. Teuffel, *Röm. Lit. Geschich.*, 3 edit., § 346, 3, § 349, 4.

<sup>5</sup> Cf. Minuc. Felix, *Octav.* 9, 6, 31, 2. Fronto seems to have written against Christianity. Thus we see that it was an object of special interest at the court.

<sup>6</sup> Cf. Minuc. Felix, *Octav.* capp. 5-13. The same reproaches against Christianity were combatted by Tertullian in his *Apologeticum*. As for the rest, there is a very strong contrast between the indisputable ignorance of Christianity on the part of the emperors and the occasionally expressed belief of the

Even the pious stoic philosophers, who played such an important part under the Antonines, had little besides contempt for Christianity. It is true the celebrated physician Galen, friend of Marcus Aurelius, acknowledges the chaste and moral life of the Christians and their fearlessness of death; he admits that the Christian faith leads to a truly philosophical manner of life, and that there are those among the Christians who do not stand behind the really wise in self-control and in zealous pursuit of virtue. But even he had nothing but contempt for the unrestricted belief of the Christians, which they had derived from the example of their founder.<sup>1</sup> The majority of the Stoics, beginning with the worthy philosopher Epictetus, cite the fearlessness of death on the part of the Christians as an example of stubborn daring and vain ostentation.<sup>2</sup>

We have handed down to us the diary-like notes of the Emperor Marcus Aurelius with its interesting confessions. There is one place where the Christians are mentioned. It reads as follows: "When is the soul truly prepared to part from the body? . . . When this readiness comes from its own decision; when it happens not merely as the result of stubbornness, as with the Christians, but with premeditation and dignity, and without loud professions, so that even others cannot escape the influence."<sup>3</sup>

apologist Athenagoras that the emperors were well versed in the Biblical writings. Cf. Athenag. *Supplicat.* 9. Justin, on the contrary, presupposes that the emperors were still ill-informed respecting Christianity.

<sup>1</sup> Cf. Galen opp. edid. Kühn, viii. 579, 657, 171; cf. Friedländer, *ibid.*, vol. iii. pp. 522, 534; Uhlhorn, *Kampf des Christenthums* (1875), p. 132.

<sup>2</sup> Cf. Epictet., *Diss.* iv. 7. The "contempt of death," at the time of the Antonines, a favorite philosophical theme, seems to have been much discussed. The apologists praise that of the Christians, and deprecate that of the heathen philosophers. Thus Tatian says of the latter: "They seek death διὰ δοξομανίαν." Epictetus, Marcus Aurelius, Aristides, and others, cast back this reproach upon the Christians. Galen is the only one who takes a favorable view. Cf. also the Peregrinus Proteus of Lucian and the highly interesting treatment of this point in the *Acta Pionii* (Ruinart, *Act. Mart. sincera* [1731] p. 126), cap. 17. In this work the value of the contempt of death as displayed by Socrates, Aristides, and Anaxarchus is expressly acknowledged, nor is it denied by the majority of the Apologists. It must be admitted that in the case of individual Christians this contempt of death took the form of ostentation. Cf. Tertull., *Ad Scapul.* 5, and the writings *Ad martyres* and *De fuga in persecut.*, *Martyr.* Polyc. cap. 4.

<sup>3</sup> Cf. Marcus Aurelius, *Confess.* xi. 3. It is probable also that iii. 16 refers

This was the view of Aurelius, and with him that of the aristocratic world. For example, to the orator Aristides the humility of the Christians (whom he styled the godless people in Palestine) seemed weakness of mind, and their fidelity to their convictions a mark of presumption, and he considered the combination of two such opposite qualities as the chief characteristics of the Christians.<sup>1</sup> Such was the judgment held at the court until near the end of the second century. There the complaint of the Apologists, that the truth was condemned unheard, finds its full justification.<sup>2</sup>

Let us cast one more glance over each of the four reigns. The death sentence of Christianity was pronounced by the first of the four emperors, Trajan, that strict and thorough reformer of the Roman state. The persecutions under Nero and Domitian were confined for the most part to Rome. They were the product of the wild caprice of the Cæsars. Tertullian exclaims justly: "Non nisi grande aliquod bonum a Nerone damnum!"<sup>3</sup> Trajan was the first to prohibit Christianity throughout the entire empire by a special law. And yet Trajan even had received a message from his vicegerent Pliny in Bithynia, which might have taught him that the Christians were neither traitors nor criminals. This letter of Pliny to Trajan, based on the most careful investigation into the affairs of the Christians, furnishes us the clearest testimony we have from a heathen pen respecting their innocence. Yet it is true that the Christians formed a special association. They would not worship the emperor's picture—and that contradicted the first principle of Trajan's policy. The emperor replied in brief terms that the Christians were not to be sought out, but if they were indicted, and if they held out firm, they were to be punished with death; if they denied their Christianity, they were to go free, but to stand under the surveillance of the police.<sup>4</sup>

This was the policy of Trajan, and it served to hold his subjects to the Christians: "To let one's self be led by the mind to whatever seems advantageous, is the part of those who deny the existence of the gods, who betray their native land, and who do the most shameful deeds as soon as they are seen by no one."

<sup>1</sup> Cf. Aristides, *Orat.* xlvi.; Friedländer, *ibid.*, vol. iii. p. 534.

<sup>2</sup> Tertull., *Apolog.* I. Cf. Justin, Athenagoras, etc., etc.

<sup>3</sup> Tertull., *Apolog.* 5. <sup>4</sup> Traj. *Ad. Plin.* l. c.

cessors in check.<sup>1</sup> Whether Trajan obtained any knowledge of Christianity beyond this, we do not know. There is no lack of stories in this connection.<sup>2</sup> Thus a report was current in the fourth century of an interview between Ignatius, Bishop of Antioch, and Trajan,<sup>3</sup> also of a decree of amnesty from the emperor,<sup>4</sup> etc.

Trajan was followed (117-138) by Hadrian, no insignificant ruler—one, however, who was no longer a Roman, but a Greek. He was what we to-day somewhat inaptly term a “modern” nature, vibrating between mysticism and scepticism, a genius full of wit, but also full of grief at the world and *blasé*, tired of the world, and yet roaming southward and eastward in search of adventures, natural curiosities, and works of art. With a sort of religious mania, he initiated himself into all kinds of mysteries, and yet ended his life with the words of doubt upon his lips.

He was the first emperor for whom apologies for the Christians were prepared during his stay in Greece.<sup>5</sup> We do not know whether he read them or not. Perhaps they found their way, as was the case also with the later apologies, to the hundreds of other memorials, in the office for petitions and complaints.<sup>6</sup> We do know, however, that he made Christianity the object of his wit. After his return from Egypt, he writes as follows to his confidential friend Servian: “Egypt, whose praises you sing to me, I find, upon thorough acquaintance, to be fickle, unstable, and disposed to make innovations at the

<sup>1</sup> Overbeck, *Studien z. Geschichte der alten Kirche* (1875), 2 Abhandl.

<sup>2</sup> Cf. Aubé, *ibid.*, pp. 186-247; Görres, in the *Zeitsch. f. wiss. Theol.*, 1878, pp. 35-47; Zahn, *Ignat. v. Antiochen* [1873], p. 242 seq.

<sup>3</sup> Concerning this legend cf. the exhaustive investigation of Zahn (*Ign. v. Ant.*, pp. 1-74).

<sup>4</sup> Cf. Overbeck, *ibid.* The martyrdom of Simeon, of Jerusalem, is attested beyond a doubt by Hegesippus (in Euseb., *Hist. eccl.* iii. 32). Probably Ignatius was not martyred under Trajan. Cf. my essay: “Die Zeit des Ignatius,” etc. 1878.

<sup>5</sup> By Quadratus and Aristides (cf. Euseb., *Hist. eccl.*, iv. 3). These are no longer extant.

<sup>6</sup> The apology of Justin is addressed to Antoninus Pius. Those of Melito and Athenagoras to Marcus Aurelius and Commodus; the pseudo-Melitonic probably to Heliogabalus (cf. Otto, *Corp. Apolog.* T. ix. p. 423 seq.); those of Apollinaris and Miltiades also to Marcus Aurelius.

most trivial rumors. There those who worship Serapis are Christians, and those who style themselves bishops of Christ are the worshippers of Serapis. No Jewish synagogue preacher is to be found there, no Samaritan, no Christian presbyter who is not at the same time a mathematician, a soothsayer, or a juggler. . . . . Money is their only god; Christians, Jews, and people of all nationalities, make this the object of their work.”<sup>1</sup>

This judgment sounds strange. It has been supposed that these were Christian heretics who came into contact with the emperor in Egypt.<sup>2</sup> This supposition, however, has no foundation. We cannot, in general, consider the words of the emperor as authentic testimony. The witty Hadrian here airs his vexation at the Egyptians with whom he had no sympathy. That he gives prominence to the fact that also the Christians in Egypt joined in the common race for wealth, may be considered as proof that he had heard still other things about their manner of life. We do not mean by this to deny that many a Christian in Egypt became infected with the excitement of business life and the selfish greed of money. Hermas, indeed, a writer in Rome at the time of Hadrian,<sup>3</sup> and brother of the resident bishop, has sketched for us a truly sad picture of one division of the Church at Rome. He censures especially a heathenish desire for gain of ambition and of worldly pursuits.<sup>4</sup>

He speaks also of members of the Christian Church in Rome of high rank,<sup>5</sup> but he makes no special mention of Christians at the court. But how influential the Christian Church at Rome even at this time must have been, may be clearly seen from a work which we possess, written by Ignatius, Bishop of An-

<sup>1</sup> Vopisc., *Saturnin.* 8. Friedländer, ii. p. 143, 6. Tertullian *adv. Marc.* iv. 33: “Dominatorem totius sæculi nummum scimus omnes.”

<sup>2</sup> Others, as e.g. Hausrath (*N. T. Zeitgesch.* vol. iii. p. 534), have declared the epistle spurious.

<sup>3</sup> For the time of Hermas, see the Prolegg. to my edition (*Patr. App. Opp.*, iii. p. 77 seq.)

<sup>4</sup> Cf. *Patr. App. Opp.*, Fasc. III., p. 79, sub. g—l.

<sup>5</sup> Cf. *Patr. App. Opp.*, Fasc. III., p. 79, sub. g, h. Concerning the members of the Roman Church at that time who belonged to the nobility, cf. also Zahn, *Hirt. des Hermas*, pp. 45 seq., 118 seq., 243, 297 seq. Hermas’ high-born mistress was herself a Christian.

tioch.<sup>1</sup> Ignatius was condemned "ad bestias" in Antioch, and was being transported to Rome. The Church there knew the fate that awaited him. While Ignatius was yet in Smyrna, he wrote a letter to the Church at Rome for the express purpose of enjoining them to make no intercession in his behalf.<sup>2</sup>

Before what other person than the emperor could this intercession be made?<sup>3</sup> The bishop expressly says that he did not doubt but that in case the Church petitioned, they might meet with success.<sup>4</sup> But we must conclude from this that there were persons at that time among the Roman Christians who possessed great influence at the court. Or was Ignatius counting upon the mercy of a Hadrian? Now, we well know that Hadrian never gave up the political principles of his father. He was not indeed a bloodthirsty tyrant, as the legend of the martyrdom of St. Symphorosa represents him,<sup>5</sup> neither, on the contrary, can we believe the story of his wishing to build a Christian temple.<sup>6</sup> Furthermore, it is not at all certain that a work concerning the affairs of the Christians, which has been ascribed to him, and which exhibits the greatest mildness, really originated with him.<sup>7</sup> What was Christianity to him? An oriental

<sup>1</sup> It is mere supposition that the martyrdom of Ignatius occurred in Hadrian's time; but the same is true of other views. As is well known, the question concerning the genuineness of the seven letters has not as yet been positively settled. Cf. Zahn, *Ignat. v. Antioch*, 1873, my essay concerning the time of Ignatius (Leipzig, 1878). The question of genuineness is of minor importance for our present purpose.

<sup>2</sup> Cf. Ignat., *Ad. Roman.* 1, 2; 2, 1, 2, etc., etc.

<sup>3</sup> Cf. Zahn, *Ignat. v. Ant.* p. 247 seq.

<sup>4</sup> Cf. id., cap. 1, 2: ἵμιν γὰρ εὐχερές ἔστιν, δὲ θέλετε ποιῆσαι.

<sup>5</sup> The Acts are printed in Ruinart (*Acta Mart. sine* [1731], p. 20 seq.). Concerning the same, cf. Aubé, *ibid.*, p. 289 seq., and Görres, *Zeitsch. f. wiss. Theol.*, 1878, p. 35 seq. The Acts are said to have originated from Julius Africanus [?]. Concerning other "acts of the martyrs" in the time of Hadrian cf. Aubé, *ibid.*, pp. 278-296.

<sup>6</sup> Cf. Lamprid., *Alex. Severus*, 43: "Christo templum facere voluit eumque inter deos recipere, quod et Hadrianus cogitasse fertur, qui tempa in omnibus civitatis sine simulacris iusserat fieri, quae hodieque idcirco quia non habent numina dicuntur Hadriani, quae ille ad hoc parasse dicebatur." What follows does not perhaps relate to Hadrian, but to Alex. Severus. The entire legend certainly did not come into existence before the third century as a convenient explanation at that time of those peculiar structures.

<sup>7</sup> The decree of Hadrian to Minucius Fundanus (found in Justin., *Apol.* i. cap. 68, and in Euseb., *Hist. eccl.* iv. 9; Latin by Rufinus). Its genuineness has

superstition like the others—a religion, interesting perhaps to the inquisitive emperor, but at the same time despicable, one of the many errors of the indiscriminating multitude; of the multitude of the poor and outcast; for to the superficial view, the Christian faith ever represented the jewel of this class of mankind.

This was true also under the government of the two succeeding emperors.<sup>1</sup> Indeed it would almost seem as if, at the time of Antoninus Pius and Marcus Aurelius, Christianity fell back still further into the lower classes. The Roman bishop in the time of Antoninus Pius came from the ranks of slavery,<sup>2</sup> and we know next to nothing of his relations to the court. Only one fact is known, that in the trial of the apologist Justin, a man named Euelpistus was also involved. To the question of the *præfect*, “Who are you?” he replied, “I am a slave of the emperor, but made free by Christ.”<sup>3</sup> Thus Christianity had not wholly died out in the palace of Antonines. It is perhaps in point here to allude again to the Christian names “Faustus,” “Faustinus,” “Faustinianus,” “Mattidia,” in the *Pseudo-Clementina*. But the philosopher upon the throne of the Cæsars, the resigned Stoic Marcus Aurelius, carried out the measures of Trajan with still greater stringency, in order to suppress the Christian religion. The province of Gaul has a story

been called in question by Keim (*Theol. Jahrb.*, 1856, p. 387), Böhringer (*Die Kirch. Gesch. d. drei ersten Jahrhunderte* [edit. ii.], T. i. p. 114 seq.), Overbeck (*Studien*, i. p. 137 seq.). Renan and others hold fast to their genuineness. Aubé (ibid., p. 262 seq.) is inclined to doubt their genuineness. This writing is indeed very suspicious in that it contains a plain deviation from the policy of Trajan toward the Christians. Concerning Minucius Fundanus, cf. Waddington, *Fastes des Provinces Asiatiques* [1872], Nos. 128, 129. He was probably proconsul of Asia Minor in 124 and 125; a friend of Pliny (see Plin., *Epp.* i. 9, iv. 15, v. 16, vi. 6) and Plutarch (see Plut., *De tranquill. animi* i., *de cohibenda ira*). This last circumstance is not unimportant for the decision as to the correspondence.

<sup>1</sup> Cf. Minuc. *Felix*, *Octav.* 8: “homines deploratæ, inlicitæ ac desperatæ factionis,” “seminudi,” “latebrosa et lucifuga natio,” etc., etc.

<sup>2</sup> We must draw this conclusion from the fact that his brother Hermas was a slave (see Vis. i. 1).

<sup>3</sup> *Acta Justiniani*, cap. 4 (Otto, *Corp. Apolog.*, T. iii. p. 270). The trial was at the close of the reign of Antoninus Pius; cf. Zahn, *Theol. Lit. Zeitung*, 1876, No. 17. Concerning other martyrs in the time of Antoninus Pius and the edict of amnesty ascribed to this emperor, cf. Aubé, *ibid.*, pp. 297-341; Overbeck, *Studien*.

to tell in this connection.<sup>1</sup> Yet the Roman rulers thought they could make short work with the Church in the same way as with a treasonable league among the plebeians. No marks of great anxiety or fear displayed themselves as yet upon the countenance of the Cæsars, and Roman writers mention almost every other religion more frequently than they do the Christian. But even the terrible persecutions under Marcus Aurelius<sup>2</sup> seemed to have had the effect of sowing the seeds of Christianity more widely.

The condition and position of the Church were much changed even under the reign of his son and successor, Commodus. The period when the Church was wont to be termed the refuge of common people and criminals rapidly passed away.<sup>3</sup> After the reign of Septimius, Christianity and the Church became public, political, and religious factors in the empire, and with this the position of the Christians at the court was modified.

ADOLF HARNACK.

<sup>1</sup> Cf. Euseb., *Hist. eccl.* v. 1 seq.

<sup>2</sup> The time of Marcus Aurelius furnishes us with a considerable number of acts of the martyrs, but hardly one of them is trustworthy. Cf. Ruinart, *l. c.*, p. 22 seq. (martyr. S. Felicitatis et septem filiorum). Aubé, *ibid.*, pp. 342-389, 439-465. Concerning the martyrdom of S. Cæcilia, who belonged to the noble family of the Cæcilii, cf. De Rossi, *Roma Sotterr.* T. ii., pp. 113-161; Kraus, *Roma Sotterr.* pp. 125, 150 seq.; Friedländer, *ibid.*, vol. i. p. 492 seq. Lipsius (*Chronologie d. röm. Bischöfe*, p. 180 seq.) has established arguments against De Rossi's presentation.

<sup>3</sup> The course of this change of feeling may be easily traced by comparing Tertullian's *Apologeticum* with the older Apologies

## THE PROPHETS AND PROPHECY IN ISRAEL.

THE recent work by Professor Kuenen, of the University of Leyden, entitled "The Prophets and Prophecy in Israel,"<sup>1</sup> is written from the standpoint of the most ultra criticism and of absolute anti-supernaturalism.

According to Dr. Kuenen's view as stated by himself, "prophecy is one of the most important and remarkable phenomena in the history of religion, but just on that account a human phenomenon, proceeding from Israel, directed to Israel." It is from God in no other sense than as "from him are all things." It is "a testimony not as out of heaven to us, but a testimony to men's need, and to Israel's peculiar destination to 'seek the Lord, if haply they might feel after him and find him.'" (A destination, by the way, which in the Scriptures is ascribed not to Israel, but to the Gentiles before Christ's coming.) "A preparation for Christianity? Yes; but in another sense than that which tradition means by these words—no prediction of facts in the life of Christ, but a preparation of the soil out of which Christianity was to spring, the prelude to the new religious creation which mankind owe to Jesus of Nazareth" (pp. 4, 5).

Prof. Kuenen proposes to settle the strife between the supernatural and the naturalistic view of prophecy by the single test of their fulfilment. To this we cheerfully assent. It is a test to which the sacred writers themselves appeal (Deut. 18:21, 22; Isa. 43:9-12; Jer. 28:9); it is palpable, obvious, and easily applied. If these predictions have been fulfilled, they are from God; if not, they cannot be from him.

<sup>1</sup> "The Prophets and Prophecy in Israel." An Historical and Critical Enquiry, by Dr. A. Kuenen, Professor of Theology in the University of Leyden. Translated from the Dutch by the Rev. Adam Milroy, M.A., with an Introduction by J. Muir, Esq., D.C.L. London. 1877. 8vo, pp. 593.

He divides (p. 25) the sources of our information respecting the predictions in the Old Testament into three classes, viz. :

“ 1st. Writings of prophets.

“ 2d. Historical accounts regarding what the prophets have done and spoken.

“ 3d. Words of God addressed to historical personages, and incorporated in the narratives concerning them.”

It would divert us too much from our present purpose to undertake here the defence of those books, or parts of books, which Dr. Kuenen sets aside as not genuine. They have been abundantly vindicated by able critical scholars. We simply remark, in passing, that the allegation that these predictions were written after the event is equivalent to a confession of the accuracy of their fulfilment which cannot otherwise be evaded. But the question at issue can be settled by prophecies whose genuineness no one has yet ventured to dispute. After all that has been done in the way of attempted elimination, enough remains to establish unmistakably the divine origin of prophecy. If this can be first settled by what Dr. Kuenen himself confesses to be the genuine productions of the prophets, he will no longer have the same motive to deny the genuineness of the rest, especially when it appears, as is in truth the case, that, even as his own critical hypotheses, these latter still afford evidence of divine prescience; for they contain predictions reaching beyond the date at which he alleges that they were written, and which have been manifestly fulfilled.

Dr. Kuenen groups what he calls the unfulfilled prophecies under three heads, as they severally relate to (1) the destiny of the heathen nations; (2) the judgments pronounced upon Israel; and (3) the expectations of the prophets with regard to Israel's future. It will be convenient to follow him in this arrangement.

The first instance adduced is this (p. 102): “The prophets are unanimous in announcing the destruction of the cities of the Philistines.” Whereupon he confesses: “It is true, indeed, that scarcely any traces remain of the very ancient glory of the five cities. They have shared in the same fate that has smitten the whole of Palestine. They have been laid desolate or have gradually decayed; after Jerusalem, indeed, but still like her

they too have fallen.” This, however, he refuses to accept as the proper fulfilment of the predictions for two reasons. First, because “the judgment contemplated is plainly one that would be executed *soon*. When delayed for a long period it ceased to be a judgment, especially in such cases as we find in Amos (1:6-8) and Ezekiel (25:15-17), where a specific sin is mentioned as the reason of Jahveh’s displeasure.” But why the divine retribution forfeits its character if it does not occur soon is not very clear. There is something striking, no doubt, in a penalty that follows swiftly upon the heels of transgression. And yet most men would concede equal impressiveness to a doom which is sure to come, however long delayed. The length of the interval renders it all the more certain that God does not forget, and that even-handed justice will not fail eventually to strike its mark. And that the prophets in particular, with whom it is that we are now concerned, did not judge it essential that a recompense must be speedy appears both from their directly declaring the reverse (Hab. 2:3), and from their undisturbed confidence when this very demand was made by presumptuous sinners of their own day (Isa. 5:19; Jer. 17:15; Amos 5:18). This Dr. Kuenen seems here to have overlooked, though his memory is less treacherous in another place when he has an end to answer by it (p. 360): “The fulfilment of their predictions can be to themselves, to a certain extent, matter of indifference; that is to say, the fulfilment in this or that specific form at that specific time. It is to them a settled truth that Jahveh is righteous, and not less that at some period his righteousness shall be revealed in a dazzling and unmistakable manner; but *how* and *when* this revelation shall take place is a question of subordinate importance. . . . If it is not fulfilled now, then it will be fulfilled at a later time.” If now, by Dr. Kuenen’s own confession, the element of time enters so little into the prophet’s expectations, by what right can it be demanded that the prediction must be fulfilled speedily or it is no fulfilment at all in the sense intended by the prophet? This is surely unreasonable, unless he has himself specified some limit within which it must occur.

Is this done in the present instance? There is no presence of it in Amos, Joel (3:4-8), Ezekiel, Zephaniah (2:

4-7) or Zechariah (9:5-7); only Isaiah (14:31) and Jeremiah (47:2) speak of a calamity to come upon Philistia from the north; and "whenever Isaiah and Jeremiah make mention of an enemy out of the north, they intimate, in no doubtful manner, that they are thinking, the former of the Assyrians, the latter of the Chaldeans."<sup>1</sup> Well, did the Assyrians and Chaldeans bring the predicted distress upon Philistia? Assyrian monuments furnish abundant evidence on this point. Sargon took Hanun King of Gaza prisoner and led him away into Assyria.<sup>2</sup> The King of Ashdod made his submission to Sennacherib, while the King of Ashkelon with his whole family were carried captive to Assyria, and a vassal placed upon the throne in his stead; the princes of Ekron were slain and impaled, numbers of the people sold as slaves, and a king created subject to Assyria.<sup>3</sup> Esarhaddon and Assurbanipal include the kings of Gaza, Ashkelon, Ekron, and Ashdod in their lists of tributary monarchs.<sup>4</sup> And as Nebuchadnezzar subdued Phenicia and Syria, and carried his arms into Egypt,<sup>4</sup> he must have overrun the whole Philistine region. So far, therefore, from these prophecies remaining unaccomplished, the very fulfilment that Dr. Kuenen asks for did take place. The Philistines were chastised by both Assyria and Babylon, and the judgment predicted, instead of ceasing with these preliminary fulfilments, went on until the region was reduced to the desolation that it now is.

But Dr. Kuenen's second objection is that "the punishment of the Philistines takes place, according to the prophets, in the interest of Israel. It is against the people of Jahveh that they have transgressed; it is the people of Jahveh, therefore, that shall reap the fruits of their destruction, take possession of their territory, and incorporate the remnant of them with themselves. In other words, with the prophets the lot of the Philistines forms a contrast to that of the Israelites. In the prophecy of Isaiah, Zion, founded by Jahveh, and a safe refuge for the poor of his people, stands in opposition to Philistia, whose inhabi-

<sup>1</sup> "Les Inscriptions Assyriennes des Sargonides," p. 36.

<sup>2</sup> Ibid., pp. 44, 45.

<sup>3</sup> Schrader, "Keilinschriften und A. Test.," pp. 229, 230.

<sup>4</sup> Josephus, "Against Apion," i. 19.

tants perish by famine and sword. The same prophet expects that the reunited tribes 'shall fly upon the shoulder of the Philistines toward the west'—that is, shall extend their dominion in that direction and make the Philistines subject to them." We might point him to the fact that the Jews under Jonathan Maccabæus and Alexander Jannæus did capture the Philistine cities; that the name Philistine thenceforward ceased out of history; and that the population of the region was subsequently absorbed into or supplanted by Jewish residents. But has not the ancient glory of Israel faded away as well as that of the Philistines? Instead of the contrast which prophecy leads us to anticipate, have they not alike fallen into decline and ruin? The answer to this question obviously involves the correctness of the prophetic expectations regarding Israel, and, to avoid needless repetition, must be reserved until the prophecies respecting Israel come regularly before us in the course of our inquiry. Meanwhile let it be noted here that all that the prophets have said concerning the Philistines has been in the fullest and strictest sense accomplished. The only point which, for the reason stated, we leave unsettled at this stage of the discussion is, Do the fortunes of Israel stand in the required contrast to those of Philistia?

The next prophecies adduced are those against Tyre by Isaiah (chap. 23) and Ezekiel (chaps. 26-28). Of the latter Dr. Kuenen says (p. 107): "What he predicts for Tyre is nothing less than entire destruction. The many nations that march against her to battle 'shall destroy her walls and break down her towers.' Jahveh 'shall sweep away her dust—the layer of earth on which her houses and gardens were placed—and make her a bare rock.' Thus she shall become 'a place where men spread nets in the midst of the sea.' The multitude of nations that execute this judgment are led by Nebuchadnezzar, the king of kings. He shall lay siege to the city, and finally 'shall enter in through her gates as men enter into a conquered town.' Then plundering and devastation follow until Tyre has ceased to exist."

Now, Dr. Kuenen confesses that "Tyre capitulated" to Nebuchadnezzar at the end of his long siege of thirteen years, and "wholly or partially lost her independence." And that this was really the case is abundantly demonstrated in Movers' elab-

orate investigation of this point,<sup>1</sup> an author whom none can suspect of being biassed in his conclusions by a regard for the authority of the prophet. He further admits, what is too palpable to be denied, that "Tyre is at present an insignificant fishing village." Every trait in the prophetic description has long since been matched by the event. But he complains that this desolation was not effected all at once; the fulfilment of the prophecy was not exhausted by the victory of Nebuchadnezzar. The city was not laid waste by him, nor its trade destroyed. It continued to be a powerful and wealthy merchant city even under the Persian dominion. All that the prophecy declares has come to pass. The correspondence between the word of the prophet and the condition to which this mistress of the seas has been reduced is signal and undeniable. But this was not brought about by Nebuchadnezzar alone. It was not the issue of his single siege. It was not accomplished in one age, nor by the operation of any one cause. The city was weakened and humbled by Nebuchadnezzar. It was still further humiliated by Alexander the Great. Other wars and struggles followed. Other causes conspired to dry up the sources of its prosperity. And because the desolation described by the prophet was only fully reached after a long interval, and was the result of many combined influences, it is most strangely argued that this must not be regarded as the fulfilment of Ezekiel's prediction. One would think that the greater the lapse of time and the more complicated the causes at work, the more decisive and complete would be the evidence of a far-reaching foresight, and that it was no merely human calculation from limited and imperfect data. The proof of prophetic power is surely not diminished or destroyed because that is foretold which only He could know who sees the end from the beginning, and to whom a thousand years are as one day.

But, says Dr. Kuenen, "Is it not clear as day that it [the prophecy of Ezekiel] announces the overthrow of the Phenicians as being *close at hand*?" The prophet says no such thing. On the contrary, it is "clear as day" that such a limitation of the prophecy to what was "close at hand" is wholly gratuitous, and

<sup>1</sup> "Das Phoenzische Alterthum," i. pp. 427-450.

is a covert assumption of the very question at issue. If the announcement made by Ezekiel were only a shrewd conjecture from the existing political situation, the prophetic horizon would have to be narrowed accordingly, and nothing that was remote or that was dependent upon causes not yet apparent could be admitted to fall within its scope. And after the prophecy has thus been degraded to a merely human anticipation, it is comparatively easy to show that it has failed. Eliminate or refuse to recognize the stamp of its divinity, and its non-fulfilment naturally follows ; for that is tacitly involved in the primary assumption. Only it is strange, on Dr. Kuenen's view of the case, if the prophecy in its true intent, as understood by Ezekiel and his hearers, was restricted to events "close at hand," that they could themselves have retained any confidence in it as a message from God ; for it was falsified before it was even put on record. The siege of Tyre came to an end years before the book of Ezekiel was issued, and Tyre still survived. Now, if no exactness of correspondence in the future between the event and the terms of the prediction could be a fulfilment of the latter in the sense put upon it by the prophet and his contemporaries, how does it come to pass that it was not utterly discredited in their esteem and refused a place in this collection professing to be uttered under the immediate inspiration of God ?

Dr. Kuenen himself, when he would convert prophecy into a vague presentiment or a pious deduction from the moral government of God, admits that the time when Jehovah's righteousness should be revealed is to the prophets "a question of subordinate importance" (p. 360). They were convinced that the haughty oppressors of his people would some time be laid low by his avenging arm, but it was not indispensable that this should be done immediately. "When their anticipations were not realized, they will have easily satisfied themselves with the thought that the fulfilment would doubtless occur at a later period. In truth it makes a *very essential difference* whether any event is estimated *in and on account of itself* or as *the form in which something else is revealed*. In the first case, its non-realization is a bitter disappointment, and for him who announced it a painful humiliation ; but this bitterness and this pain are not felt when recourse is at once had to the conviction :

if it is not fulfilled now, then it will be fulfilled at a later time ; the righteousness of Jahveh endures and *must* positively some time come to light.”<sup>1</sup> Dr. Kuenen fancies that Ezekiel himself expected Nebuchadnezzar to accomplish all that he uttered in his prediction respecting Tyre. This is nowhere stated in the prediction itself. It is merely Dr. Kuenen’s opinion. But suppose him to be correct ; what then ? We do not claim omniscience for the prophet, but simply inspiration and unerring truth for his prediction. And even on the low view of prophecy entertained by Dr. Kuenen, the essential thing in the prophet’s mind was the vindication of God’s righteous judgment ; the time when this should take place was of little consequence. The fact, not the period of its manifestation, was what he regarded as absolutely certain. Whenever this manifestation should occur, it would be to him the fulfilment of his prediction. How can Dr. Kuenen, therefore, on his own principles, justify his assertion that the event must be “ close at hand ” in order to verify the prophet’s anticipation ? Much less can it be necessary to the accomplishment of that which is a direct revelation from the omniscient God himself. In fact, it looks somewhat like grasping both horns of a dilemma at once, when Dr. Kuenen, in his zeal to fasten human infirmity on the prophecies, affirms with one breath that a particular event “ close at hand ” must have been intended by them, so that nothing else can be a fulfilment of them, and with the next declares that the manifestation of Jehovah’s righteousness is the one fixed conviction of the prophets, irrespective of either time or mode.

But, says Dr. Kuenen, “ Ezekiel himself declares that his expectations concerning the fate of Tyre were not realized ” (Ezek. 29 : 18-20). “ Son of man, Nebuchadrezzar King of Babylon caused his army to serve a great service against Tyre : every head was made bald, and every shoulder was peeled : yet had he no wages, nor his army, for Tyre, for the service that he had served against it ; ” whereupon the land of Egypt is promised him for his wages. Dr. Kuenen very naturally apprehends that this proof will be suspected of being so very strong as to be

<sup>1</sup> The italics in the various quotations from Dr. Kuenen are invariably his own.

worth nothing (p. 110): "How by any possibility can Ezekiel come forward as a witness against the realization of his own prophecy?" The fact is that the sense put upon this passage is an utter perversion of its meaning. Nebuchadnezzar must have performed the work against Tyre which the Lord had assigned to him, or he would not have earned the wages which are here promised him and declared to be rightfully his. The prophet revokes nothing of his former prediction. He confesses to no failure or disappointed expectations. He makes no attempt to accommodate the expressions which he had previously used to an event which had turned out differently from his anticipations. He simply says, Nebuchadnezzar has done his work, which was an exceedingly toilsome one, and has thereby earned a larger wages than the spoils of Tyre afforded him; he shall have Egypt in addition to make up full payment. There is nothing surely in this that looks as though Ezekiel regarded his prophecy against Tyre as having failed in so far as respects the work committed to Nebuchadnezzar, but the very reverse.

Nevertheless, says Dr. Kuenen, "this much is plain, that Nebuchadnezzar did not enter in through the gates of Tyre as men enter into a conquered city" (Ezek. 26:10). How does he know? And "as little did his troops carry away the wealth of Tyre and plunder her merchandise" (v. 12). Tyre was open seaward during the entire siege. The wealthiest citizens may have fled to distant colonies and taken their goods with them (Isa. 23:6, 7, 12). The treasures of their sanctuaries may likewise have been temporarily removed for safe-keeping. And the terms of the capitulation, of which we know nothing, may have limited the amount that the conqueror should receive. It is very easy to understand how he could have "made a spoil of its riches," and yet not be adequately paid for his long and toilsome service.

In regard to Isaiah's prediction against Tyre (chap. 23), Dr. Kuenen complains that its fulfilment is sometimes sought in the siege of that city by Shalmaneser King of Assyria, and sometimes in that by Nebuchadnezzar; and he insists that a choice must be made between them. But what is there to hinder its embracing both? It is a declaration of God's work of judgment upon Tyre to be executed partly by one instrument and partly

by another, which in the actual unfoldings of history met its partial accomplishment in different periods successively, but is here gathered up into a single picture of its future destiny.

To the general prediction of its overthrow, the prophet adds the specific statement (vs. 15-18) that Tyre shall be forgotten seventy years, after which her trade shall revive and her gains, instead of being treasured up for her own advantage, shall be holiness to the Lord. Dr. Kuenen remarks that "facts like those announced here cannot pass away without leaving some traces." And they have not done so, even though he professes that he has not been able to find them. The term of her humiliation is at once explained by the declaration of Jeremiah (25:11) that the land of Judah and all contiguous nations, among whom (v. 22) Tyre is expressly included, should serve the King of Babylon seventy years. This is precisely the interval between the decisive victory gained by Nebuchadnezzar at Carchemish over Pharaoh-necho King of Egypt (Jer. 46:2), which opened his way to Jerusalem and the neighboring kingdoms that had combined against him, and the conquest of Babylon by Cyrus. That Tyre continued after its siege by Nebuchadnezzar to be subject to Babylon till the latter city was itself overthrown by Cyrus is apparent from an extract which Josephus<sup>1</sup> has fortunately preserved for us from Tyre's own annals. This informs us that Hiram, who was reigning in Tyre when Cyrus became king of Persia, as well as his brother and predecessor, had been brought from Babylon to be placed upon the throne.

But what shall be said of the predicted conversion of this heathen city with its wealth to the service of the Lord? There has been an incipient fulfilment of this which should not be overlooked. Tyre had its Christian disciples in the days of the apostles (Acts 21:3-6), and subsequently a flourishing church. It was the seat of a bishop; its cathedral was the most elegant structure in Phenicia; synods were held there. It had a Christian population down to the time of the crusades, when it was erected into a Latin archbishopric under the patriarch of Jerusalem. One of the most noticeable among the ruins of ancient

<sup>1</sup> "Against Apion," book i. § 21. A hint of Tyre's reduced condition at the close of the exile may be found in the fact that Zidon is mentioned before it, (Ezra 3:7) instead of after it, which is the usual order.

Tyre is that of a Christian church, which was originally a large and splendid structure. This, however, is but the budding of a fulfilment, and by no means all that the prophecy leads us to expect. The consideration of what further is involved in it can best be postponed to a subsequent part of this inquiry, when it shall be taken up again, together with the claim made by Dr. Kuenen (p. 110) that the punishment of Tyre, as of the other neighbors of Israel, should precede the return of Israel to their native land on the ground of Ezek. 28:24-26. We can only appreciate this correctly when the prophecies respecting Israel shall come before us.

The next prediction introduced is that of Jeremiah (49:23-27) against Damascus, where the whole ground of cavil is based upon an ambiguous word in the English version, of which advantage is taken to put a sense upon it which the original will not at all admit. "How is the city of praise not left!" is thus paraphrased, "Why might not Damascus have remained?" and this affirmed to imply "its permanent desolation;" whereas the first glance at the Hebrew is sufficient to show that "left" in this place means not *permitted to remain*, but *forsaken*, and there is no intimation whatever that it should not survive or recover from the threatened blow. In the scanty accounts that we possess of this entire period, it is not surprising that the event referred to has passed without mention. Josephus (Ant. x. 11, 1) speaks of captive Syrians taken to Babylon at the outset of Nebuchadnezzar's reign; and the subsequent course of events makes it more than probable that this was again repeated.

Of Ammon and Moab it is predicted, as Dr. Kuenen states, that "the two nations shall both be driven away or extirpated, and their cities shall be laid waste." And he adds, "this fate has in fact overtaken them." But he objects (p. 114) that "they were still inhabited and flourishing up to the seventh century of the Christian era;" whereas "the prophets do not expect [Isa. 11:14; 25:10; Zeph. 2:9, 10] that Moab and Ammon shall in the course of ages lose their national existence along with or even after Israel, but that *Israel shall be a witness of the destruction of their enemies, and shall reap the fruits of that destruction.*" "The prophecy that Israel shall appear as the inheritor of Moab and Ammon of itself absolutely forbids

us to see the realization of what Zephaniah expected, in the ruin of those nations six centuries after the second destruction of Jerusalem." But the punishment was not altogether postponed to this late period. The entire region was subdued and ravaged by Nebuchadnezzar. Josephus (Ant. x. 9, 7) specially mentions the subjugation of Celesyria, Ammon, and Moab. That he purposed specially to attack the Ammonites we learn from Ezek. 21:20; and he had reasons for so doing both in the combination into which they had entered against Chaldea (Jer. 27:3), and in their harboring and perhaps instigating Ishmael the murderer of Gedaliah, whom the King of Babylon had made governor after the capture of Jerusalem (Jer. 40:14; 41:2, 15).

The relation of these lands to Israel when restored will be postponed until that subject is considered in connection with other nations.

For proof of the fulfilment of the predictions respecting the Edomites we need not go beyond that furnished in Dr. Kuenen's own pages, and which he vainly endeavors to set aside. In the time of Malachi, as 1:3, 4 expressly states, Esau's mountains and his heritage were lying waste. If this was effected, as there is every reason to believe, by Nebuchadnezzar in the expedition<sup>1</sup> five years after the destruction of Jerusalem, in which he subjected the Ammonites and Moabites and advanced into Egypt, then here we have the evidence that "nearly a century after the end of the captivity," when the Jews were restored and Jerusalem was rebuilt, Edom was still a desolation, and the prospect of recovery was as remote as ever. This certainly is not "the very opposite" of the representation in Joel 3:19, 20, but precisely coincident with it. Obad., v. 18, Ezek. 25:14 found accomplishment in the spoliation of the Edomites by Judas Maccabæus, then by John Hyrcanus, "who completely subdued them about B.C. 130, compelled them to adopt the rite of circumcision, and incorporated them into the Jewish state;" then "by Simon son of Gioras, the head of one of the factions. The nation of the Edomites is mentioned no more after the destruction of Jerusalem (A.D. 70): it was partly

<sup>1</sup> Josephus, Ant. x. 9, 7. This is not at variance with Ezek. chap. 35 or 36:5, which were uttered just after the fall of Jerusalem (33:21), nor with Isaiah 34, which was not written in the exile, but long before it.

incorporated with the Jewish nation, partly blended with other Arabian tribes. Meanwhile their former capital, Sela, and a great part of their ancient territory had already, many centuries before, passed into other hands." It is now reduced to utter desolation. Its interval of wealth and flourishing trade, during which it is better known to us by its Greek name Petra, and when it was occupied by others than Edomites, does not prevent this region, first wrenched from the children of Esau, then wasted as at the present day, from bearing its striking testimony to the truth of the prophecies.

Ezekiel's prediction of the forty years' desolation of Egypt (29 : 11-16) has long proved perplexing to interpreters, and is, we frankly admit, somewhat difficult to reconcile with Herodotus' statement (ii. 177) that the reign of Amasis, a considerable portion of which falls within this predicted term, "was the most prosperous time that Egypt ever saw." This is no new embarrassment raised by Dr. Kuenen, however; the whole matter had been thoroughly sifted, and every thing possible to be said had been said about it, before he was born, and that without shaking the confidence of those veteran scholars in the divinity of the prophet's word. In spite of Dr. Kuenen's confidence that the result which he has obtained "defies all reasonable contradiction and will in the end be generally received," we think it can be made to appear that he is over-hasty in his conclusions. From the time of the decisive battle of Carchemish, at all events, as Dr. Kuenen correctly states, Jeremiah predicted that Nebuchadnezzar would invade Egypt and subdue that country (Jer. 46 : 13-28). This he still continued to affirm years afterwards, when Jerusalem had been destroyed, and Gedaliah murdered, and the wretched remnant of Jews fled, contrary to the prophet's earnest remonstrance, to Egypt for protection (Jer. 43 : 8-13 ; 44 : 12-14); and the death of King Pharaoh-hophra by the hands of his enemies is made the sign of its fulfilment (44 : 29, 30). Ezekiel repeats with still more particularity that Nebuchadnezzar shall invade the land of Egypt, and that it shall be desolated for forty years, and the Egyptians shall be scattered among the nations; but at the end of forty years they shall be regathered into their own land, though Egypt shall thenceforth be a base kingdom, and no

more exalt itself above the nations nor be any more the confidence of the house of Israel.

Now, of all this Herodotus gives no account. He makes no mention of the subjugation of Egypt by Nebuchadnezzar. But it is to be borne in mind that Herodotus received his information from Egyptian priests, and they did not scruple, as he himself declares his belief more than once (iii. 2, 16), to falsify the truth of history in their own interest. Herodotus nowhere mentions Pharaoh-necho's defeat by Nebuchadnezzar at Carchemish, which put an end to Egyptian rule in Asia, and this though he speaks of that very expedition of Necho and his victory over Josiah at Megiddo. He nowhere speaks of Nebuchadnezzar at all, or of his coming into armed collision with Egypt. And yet the silence of Herodotus does not, even with Dr. Kuenen himself, discredit the battle of Carchemish, or call in question its decisive character. Still further, Herodotus never alludes to the conquest of Egypt by any king of Assyria; and the assertion of the capture of Thebes made by Nahum (3 : 8-10) was discredited by Dr. Kuenen and other similar critics, on the ground that no ancient historian mentions it, and the monuments existing in unbroken continuity make no allusion to it and have no room for it. But an inscription of Assurbanipal was found in which he relates the fact, and the critics were obliged to retract. The records of the Assyrians are similarly oblivious of defeats suffered by themselves. Sennacherib records in full his annual successes, but makes no allusion to his disastrous overthrow, of which we know both from the sacred historians and from Herodotus, the Egyptian priests having no motive for silence in this instance.

The silence of Egyptian informants is, therefore, not conclusive of the non-occurrence of what was disastrous to Egypt or mortifying to its pride. Now, if Dr. Kuenen will but distinguish between what the prophets actually say and what he imputes to them as their meaning, but which they do not say, we do not despair of convincing even himself that what the Jewish prophets predict respecting Egypt is entirely consistent with what Herodotus relates of the corresponding period.

"Hophra," he says (p. 124) with a flourish of italics, as though the prophet were contradicted point-blank by the testi-

mony of the historian, “ did *not* fall in the war against Nebuchadnezzar.” Well, no prophet said that he would. Jeremiah says (44:30), speaking from the mouth of God, “ Behold, I will give Pharaoh-hophra King of Egypt into the hand of his enemies, and into the hand of them that seek his life.” Again (46:26), “ I will deliver them”—*i.e.*, Pharaoh and all them that trust in him—“ into the hand of those that seek their lives, and into the hand of Nebuchadrezzar King of Babylon, and into the hand of his servants.” Now, what is the testimony of Herodotus? It is thus summed up in Dr. Kuenen’s own words: “ An insurrection broke out. Amasis, who was commissioned by the king to suppress it, placed himself at the head of the insurgents, defeated the mercenary forces, took Apries (Hophra) prisoner, and after some hesitation consented to his death.” Is not the language of Jeremiah fulfilled to the letter? Pharaoh-hophra was delivered into the hand of them that sought his life.

But in his zeal to bring forth a contradiction where there is entire harmony, Dr. Kuenen holds the following most extraordinary language: “ The narrative of Herodotus leaves no room for a temporary subjection of the Egyptians to the Chaldeans, or even for a successful invasion of their country by Nebuchadrezzar. How could Hophra have been able to undertake an expedition against Cyrene in 569 B.C., if in or after 570 B.C. he had been defeated by Nebuchadrezzar? For in this year, the twenty-seventh of Ezekiel’s captivity, the conquest of Egypt by the Chaldeans had not yet, according to this prophet himself (29:17-21), taken place. Is it not absurd to suppose that it happened immediately thereafter, still in 570 B.C., and in the following year had been already forgotten?” It is astonishing that Dr. Kuenen can either content himself or expect to blind his readers by so transparent a trick as this. He has made an absurd supposition, which no one dreams of entertaining, as though it were involved in the truth of the prophet’s prediction, but he has altogether evaded the simple and obvious explanation of the case which offers itself at once upon his own statement of the facts.

If Nebuchadnezzar had not yet invaded Egypt 570 B.C., and Hophra was involved in civil war 569 B.C., what more natural,

or more in accordance with the usual policy of ambitious monarchs, than that these domestic disturbances had either been fomented for the purpose or were seized upon as the occasion of foreign interference? Thus Sir Gardner Wilkinson :<sup>1</sup> "We can readily imagine that the Assyrians, having extended their conquests to the extremity of Palestine, would, on the rumor of intestine commotions in Egypt, hasten to take advantage of the opportunity thus afforded them of attacking the country. . . . From a comparison of all these authorities, I conclude that the civil war between Apries and Amasis did not terminate in the single conflict at Momemphis, but lasted several years; and that either Amasis solicited the aid and intervention of Nebuchadnezzar, or this prince, availing himself of the disordered state of the country, of his own accord invaded it, deposed the rightful sovereign and placed Amasis on the throne, on condition of paying tribute to the Assyrians. The injury done to the land and cities of Egypt by this invasion, and the disgrace with which the Egyptians felt themselves overwhelmed after such an event, would justify the account given in the Bible of the fall of Egypt; and to witness many of their compatriots taken captive to Babylon, and to become tributary to an enemy whom they held in abhorrence, would be considered by the Egyptians the greatest calamity, as though they had forever lost their station in the scale of nations. And this last would satisfactorily account for the title of Melek, given to inferior or to tributary kings, being applied to Amasis in some of the hieroglyphic legends accompanying his name."

If this view of Wilkinson and others is correct,—and it is difficult to see what well-founded objection can be made to it,—then it is perfectly easy to reconcile the statement of Herodotus that Pharaoh-hophra was put to death by the Egyptians, to whom he was delivered over by Amasis, and that of Josephus that he was slain by Nebuchadnezzar. The Egyptians were the immediate actors, but it was at the instance of the King of Babylon.

Dr. Kuenen's attempt to discredit the authority of Josephus, who here expressly vouches for the fulfilment of the

<sup>1</sup> "Manners and Customs of the Ancient Egyptians," vol. i. pp. 177-179. See also notes to Rawlinson's Herodotus, ii. 177, and chap. viii. of appendix to book ii. pp. 322 ff.

prophet's predictions, will scarcely gain the approval of any who do not agree with him in his foregone conclusion. Josephus<sup>1</sup> expressly appeals to the authority of Berosus for the affirmation that Nebuchadnezzar "conquered *Egypt* and Syria and Phœnicia and Arabia, and exceeded in his exploits all that had reigned before him in Babylon and Chaldea." The charge that Berosus is "altogether unhistorical" in speaking of Egypt as subject to the Chaldean empire prior to the time of Nebuchadnezzar sounds strangely since the discovery of Assurbanipal's conquest of Egypt, which on the fall and partition of the Assyrian empire would come under the dominion of Babylon, or at least be claimed by it. And how could Nebuchadnezzar have exceeded all other monarchs of the great Asiatic empire in his exploits if he failed in his attempt upon Egypt, which others had subdued? The language of Megasthenes, that Nebuchadnezzar "subdued the greater part of Libya and Iberia," is doubtless an exaggeration; but upon what could such an exaggeration have been built if he never even penetrated into Africa?

The allegation that Josephus infers his facts from the predictions is utterly groundless and gratuitous. That he mentions<sup>2</sup> the predictions respecting the King of Babylon's conquest of Egypt, and adds "which things came to pass," implies, on the contrary, that he discriminates between the prophecy and its fulfilment, and had independent information of the latter. That he borrows freely from the historical statements of Jeremiah is no ground for the unworthy sneer that he has been "caught in the very act" of narrating as fact that for which he had no historical voucher. The circumstance to which Dr. Kuenen appeals (p. 128), that Josephus does not record "the forty years' desolation of Egypt, and the subsequent partial restoration which Ezekiel mentions," shows that he does not simply and without warrant convert prophecy into history, as is charged upon him. The attempt to involve Josephus in chronological conflict both with himself and with the prophet Ezekiel is based upon the following passage from the section

<sup>1</sup> "Against Apion," i. 19.

<sup>2</sup> "Antiquities of the Jews," x. 9, 7.

just now quoted: "On the fifth year after the destruction of Jerusalem, which was the twenty-third of the reign of Nebuchadnezzar, he made an expedition against Coele-Syria, and when he had possessed himself of it, he made war against the Ammonites and Moabites; and when he had brought all those nations under subjection he fell upon Egypt in order to overthrow it, and he slew the king that then reigned and set up another, and he took those Jews that were there captives and led them away to Babylon." Upon this Dr. Kuenen comments as follows: "That the Chaldeans conquered Egypt in the year 581 B.C. is irreconcilable with the testimony of Ezekiel, from which it is evident that the conquest had not yet taken place in the year 570 B.C., and with the account of Josephus himself that Nebuchadnezzar besieged Tyre for thirteen years —probably from 585 to 572 B.C.: the invasion of Egypt cannot surely be regarded as an episode of that siege!" This is merely the cavil of one who is determined to create difficulties at all hazards: it has no other foundation than the assumption, without one word in Josephus to justify it, that all the events grouped together in the paragraph above quoted occurred in one and the same year.

And now, after all the ado made about these prophecies respecting Egypt, and the confident assertion that nothing but "dogmatical reasons" can lead any to continue to defend them, the case stands thus: The silence of Herodotus respecting a conquest of Egypt by Nebuchadnezzar is no just reason for questioning the reality of its occurrence. The facts that he does state coincide perfectly with the assumption of such a conquest, and are moreover in entire harmony with the statements of Josephus, who positively avers it, and the correctness of whose narrative there is no sufficient reason for impugning; while it is both intrinsically probable, and has the explicit warrant of Berossus, a native Babylonish historian. In fact, the entire history of the period and the whole life of Nebuchadnezzar are unintelligible without the invasion of Egypt, which was the natural sequence of the victory at Carchemish, and of the struggle for predominance in Western Asia between the great empires of the east and south (see 2 Chron. 35:21).

Nebuchadnezzar, too, had steadily followed up his victory

by the siege of Jerusalem, by overrunning the contiguous lands, Moab, Ammon, and the rest, and by the reduction of Tyre, which finally opened the way for this long-contemplated campaign. That this was the well-understood policy of the Babylonish monarch from the beginning, is shadowed forth by constantly repeated predictions to this effect from Jeremiah and Ezekiel, as Dr. Kuenen must confess; for even upon his low views of prophecy they reveal the popular expectation, and the convictions of shrewd thinkers, and the drift of events. Vitrunga suggests, not improbably, that it was the current expectation of an invasion of Egypt by Nebuchadnezzar that gave rise to the oracle reported by Herodotus (2, 58), that Necho, in building the canal to the Red Sea, was "laboring for the barbarian." And the fact that Nebuchadnezzar was occupied during the later years of his life with his magnificent buildings and adorning Babylon implies the success of his invasion, and that he had reached the summit of his ambition and terminated the long strife between the empires.

But what, it may still be said, is to be thought of Ezekiel's prediction of the forty years' desolation of Egypt? These forty years are plainly the residue of the seventy years' domination of Babylon foretold by Jeremiah (25:11, 12), beginning with the battle of Carchemish, which broke the power of Egypt and established the empire of Babylon in the west, and ending with the capture of Babylon and subversion of the Chaldean empire by Cyrus. A trifle more than thirty of these predestined years had elapsed when Nebuchadnezzar ended his siege of Tyre, and now, the last obstacle removed, was prepared to strike the final blow which he had meditated from the outset, by pushing his conquests into the very heart of Egypt. Thus began that period of desolating war and humiliating subjection to a foreign yoke which was terminated only by Babylon's own fall, in round numbers forty years, historically reckoned perhaps thirty-six or thirty-seven years; though, if absolute precision to the very letter be demanded in the fulfilment, while in the absence of full historical data of the period it cannot be rigorously demonstrated, there will be little difficulty in assuming it. The beginning and the end of such a period of calamity cannot be sharply defined.

Egypt was harassed by internal dissensions, and doubtless by incursions from the troops of Nebuchadnezzar before his invasion was made in force. And the power of Babylon in the remoter parts of the empire was not instantly dissipated upon the capture of the city.

The surprisingly strong language of the prophet (29 : 10, 11), “I will make the land of Egypt utterly waste and desolate : . . . no foot of man shall pass through it, nor foot of beast shall pass through it, neither shall it be inhabited forty years,” admits of a twofold vindication. 1. These universal and sweeping expressions are necessarily limited by the nature of the case. It is a strong description of the desolation which would follow in the track of war, the consternation, pillage, massacre, which would so change the face of the peaceful and populous empire that it might be said to convert it into a desert. It is the natural language of hyperbole, which every one understands, and in which it would be contrary to sound interpretation and be a perversion of the real meaning of the writer to insist on the exact literality of the expressions ; as much so as when the evangelist says (John 21 : 25), that if all the acts of Christ were to be written the world itself could not contain the books. Compare Luke 19 : 40. It might as well be insisted that the language of every metaphor is to be pressed in its most literal sense. This is not interpretation, but perversion.

2. Again, it is to be borne in mind that prophecy does not always exhaust itself in a single fulfilment. This is the case here. The prophet Ezekiel, while speaking more immediately and directly of the judgment to be inflicted on Egypt by Nebuchadnezzar, nevertheless has as his more general theme God’s whole work of judgment upon Egypt, by which its hitherto colossal power and greatness were to be broken, and it should cease to be the object of idolatrous trust to Israel (29 : 16) that it then was and had long been. The first and preliminary stage in this process of degradation and humiliation was to be effected by Nebuchadnezzar : this was the initial yet decisive blow which presaged and involved all the rest. In describing it, consequently, the prophet does not view it as an isolated act and apart from its connections, but places it in combination

with all that properly appertains to it in the design of God, links it with its whole train of predestined sequences, and virtually gathers into one picture what God in bringing this to pass designed to effect. The purpose of God which sent Nebuchadnezzar into Egypt was not limited to that one act, but contemplated the reduction and humiliation of Egypt. This invasion was but the first step of a more comprehensive plan, the initiative and pledge of more to follow, an integral part of an indivisible whole as viewed in the divine mind and as here regarded by the prophet. Nebuchadnezzar's invasion of Egypt as the first member of a closely concatenated series carried with it in the purpose of God all that was to come after, all that Egypt was thenceforward to suffer from subsequent invasions and oppressions by Persians, Macedonians, Romans, Saracens, Mamelukes, and Turks. And the strength of the prophet's expressions are graduated accordingly. While primarily spoken of Nebuchadnezzar, they have a residuary meaning that covers all that has since been developed from them. In like manner our Lord, in his memorable prophecy (Matt. 24), in which he blends together the destruction of Jerusalem and the end of the world as constituent parts of one grand drama of divine judgment on transgression, adds, "Verily this generation shall not pass till all these things be fulfilled." The first stadium of accomplishment, the foretaste and assurance of the whole, was then to be completed in the destruction of the Jewish capital, though there is a residuary meaning in his words which shall not be fully exhausted until the final judgment.

Dr. Kuenen does not disguise the contempt with which he regards this mode of interpreting prophecy, as though it were arbitrary in the extreme. We shall not at this point of the discussion enter as yet upon its defence and confirmation. If prophecy is, as it claims to be, a divine product, there is no reason why it should not thus take its shape from the divine purposes. Whether it does so in actual fact we shall inquire more particularly hereafter. We only remark at present that such a mode of interpretation, if feasible and proper, would satisfactorily explain the prophet's language, and justify us in peremptorily and in the most decided terms reversing our author's confident conclusion (p. 128), "that the future of

Egypt was concealed from Ezekiel, and that the reality did not even remotely correspond to his postulates."

Isaiah's prediction (20:4), "that the king of Assyria shall carry the inhabitants of Egypt and Ethiopia away ignominiously out of their land," was fulfilled to the letter, as is shown both by Nahum 3:8-10 and by an inscription of Assurbanipal—testimonies which are adduced by Dr. Kuenen himself (p. 121), and which he vainly seeks to set aside by the quibble that Isaiah "expects" this to be done by Sargon, whereas it was effected by his great-grandson. The sufficient reply to which is, that the meaning of the prophecy is to be determined not by what Dr. Kuenen conceives to be the "most obvious supposition" of what Isaiah "expects," but by its own explicit declarations. It was an expedition of Sargon which gave occasion to the prophecy; the triumph over Egypt, however, is ascribed not to Sargon, but to "the King of Assyria." The assault made by Sargon was followed up by his successors until the words of the prophet were amply verified.

It is no prejudice to the inspiration of Isaiah or of Micah if "the overthrow of the Assyrian empire is not predicted" by them. Such a prediction could not be expected from Micah, for his prophecy is limited exclusively to the fortunes of the people of God. Isaiah, on the other hand, does foretell Assyria's downfall with prominent reference indeed to Sennacherib's disastrous defeat (10:24-34; 17:12-14; 30:31 ff.; 31:8, 9), but in terms which may easily be understood as reaching much further and implying a more complete destruction. But at any rate the prophet is not omniscient. He has no predictive faculty by which he can survey the future at will. He knows barely what is revealed to him; of all else he is as ignorant as ordinary men. The fact that Isaiah depicts in the blissful future "a highway out of Egypt to Assyria" (19:23), and that Micah 5:5, 6 describes the coming Redeemer as Isaiah's protector against Assyrian invasion, may or may not warrant Dr. Kuenen's inference that for aught they knew the Assyrian empire would last until Messiah's days. But in either case the language is as consistent with strict truth as in any of those numerous instances in which the prophets set forth the future under figures borrowed from the present or the

past. How can the unknown be more intelligibly and impressively represented than by emblems taken from what is known and familiar? Thus when Isaiah would express the thought that the exiles of Israel shall be brought back to their own land under immediate and evident divine guidance and protection, he represents their return from the land of their oppressors as a fresh exodus out of Egypt, in which the miracle of the Red Sea shall be repeated (11:15), and water again brought for them from the rock (48:21). The particular forms in which this almighty intervention shall be exerted on their behalf are of small account compared with the essential fact itself. Thus, too, when Ezekiel would make Israel sensible that they were on a par with the worst offenders, and that their future restoration was wholly of God's unmerited mercy, he tells them that Sodom and her daughters shall likewise be restored to their former estate as well as they, and be associated with them in the closest intimacy and relationship (16:53, 55, 61); not, of course, that there was to be a literal resurrection of the cities of the plain, destroyed by fire from heaven, but that the same grace which rescues Israel will reach to Sodom's spiritual counterpart, and bring into restored communion with God and into fellowship with his people the most degraded heathen, the very dregs of the human race. Compare Isa. 1:10; Rev. 11:8.

It may have been of little consequence to Isaiah or to Micah, or to their contemporaries, to have the political changes disclosed to them by which Assyria was to be superseded on the map of the world or erased from the roll of nations; but it was of vast moment to them to know that, whether the ancient Assÿria should survive or whatever new Assyria might arise to take its place, the strife between the great empires of the world should hereafter give way to peaceful and amicable intercourse, and instead of their present animosity toward the people of God, they should be heartily united with Israel in the service of Jehovah. And should any future Assyria venture to molest Israel or disturb his peace, his Messiah would effectually protect him and avenge his cause.

Of Nahum's and Zephaniah's predictions of the total destruction of Nineveh, Dr. Kuenen well says, "History has set its seal on these anticipations." He claims, however, that

there was "one respect in which their predictions were not confirmed by the issue. Nineveh was depopulated and became a desolation in a comparatively brief space, but still not all at once" (p. 131). But how this militates against the truth of the prediction does not appear; much less what there is to justify Dr. Kuenen in speaking as he does (p. 133) of "the opposition between the contents of the prophecy and the historical reality." A summary statement of an event occupying long periods of time and passing through various phases, which seizes on its main features or depicts it in its consummation, may be just as true and for some important purposes vastly more effective than an account which enters into every minute detail. Nahum vividly describes the assault upon Nineveh, its capture, and its desolation. That this would all be finished at a stroke he does not say. The fact is revealed to him; the length of time that it would occupy, and the successive steps through which it would attain to full accomplishment, are not revealed. But the fulfilment is none the less accurate on that account, now that every item in the prediction has been verified; in fact, the longer the process the more far-seeing is he who can infallibly forecast its termination, and the clearer the evidence that it is no mere deduction of human sagacity.

To this view of the case Dr. Kuenen interposes two objections. 1. "It is judicial *punishments* which the prophets announce. But the destiny of the heathen nations loses that character when slow decay takes the place of sudden destruction." Unless Dr. Kuenen is disposed to dispute the moral government of God altogether, and to deny the reality of divine retributions in this world, he must mean, not that punishment ceases to be such because tardily inflicted or slowly evolved, but that men are in this case in danger of not recognizing it as such, and of being diverted from considering it in its real nature as a judicial infliction to what is merely subordinate and incidental. And this brings to light a prominent reason for that frequent peculiarity of prophetic representation which we are now considering and at which Dr. Kuenen takes such offence. The prophet not only discloses but interprets the future. It is the finger of God in human events which he is particularly concerned to mark. Prophecy is not the random disclosure of the

future for the sake of gratifying curiosity, exciting wonder, or even confirming a divine commission. This last is an incidental end of great value, but the prophet is mainly and properly the inspired religious teacher and guide of the people. The purposes of God in the future, so far as these are revealed to him, supply lessons of warning and instruction. He is concerned with the future only as it manifests the grace or the justice of God ; with coming calamities only as judicial inflictions, with coming good only as a fruit of the divine favor. The minutiae of historical detail, if disclosed to him, would be nothing to his purpose ; the intervals of time, the fluctuations and varying phases of events, the second causes concerned in their production, are all unessential to the end for which prophecy is communicated, viz., that of impressing moral and spiritual lessons on the minds of the people. In fact, they are not only of inferior consequence, but it would be disturbing and distracting to introduce them. The lesson of God's judgment on a guilty nation is made more impressive by presenting it in its unity, by gathering it all up into one summary, comprehensive view, which shall truthfully represent and faithfully depict it in the aggregate or in certain marked and salient features, and direct attention to the moral sequences and the design of God in the whole from first to last. And, if this is to be done, it is of course necessary to pass over slightly or altogether leave out of sight much that is purely accessory and contingent, and which would only serve to turn away the thoughts from the main point to be inculcated.

And this is important, not only for the immediate hearers of the prophet, but for those as well who live when the events predicted come to pass, to give them the true key for the understanding of that which they behold. Dr. Kuenen says, "Surely none of those who witnessed the decay of heathen nations could regard it, as the prophet wished it to be regarded, as the execution of a sentence pronounced by Jahveh." But, instructed by the prophet beforehand, men can do this : they can then trace in the slow evolutions of history what he has foreseen in his condensed picture and set in its true divine relations. This "deviation in details," therefore, "between the prediction and the historical fact," at which Dr. Kuenen cavils,

results from the divine adaptation of prophecy to its proper end in the instruction and training of the people of God.

Dr. Kuenen's second objection to the view that a neglect of the relations of time is consistent with the truth of prophecy is that prophecy not infrequently does take cognizance of these relations. "Fixed dates are not wanting in the prophecies. The prophets thus show that they perceive very well that dates are any thing but indifferent. In a number of prophecies the cardinal thought itself stands or falls with the succession of events therein announced." This is certainly so. And we quite agree with Dr. Kuenen's criticism upon those who speak of the "perspective" character of prophecy as if it were one of its invariable features, or of inner intuition as the fixed form of prophetical revelation, that they attribute to all prophecies what is applicable only to a portion of them. The phenomena of vision may be serviceable in illustrating that frequent peculiarity of prophetic representation, to which we have before adverted; but to resolve prophecy into vision and to determine its laws accordingly, is to enter the region of doubtful speculation. The Spirit of the Lord is limited to no one method in making his disclosures. The ends of his revelation are better answered sometimes, as we have seen, by excluding all reference to the lapse of time; at others definite dates are given, and the chronological order of events is distinctly indicated. And when the latter is the case, the fulfilment must of course conform to the statements of the prophecy in these particulars.

The special application which Dr. Kuenen proposes of this principle is the following: "Is the judgment upon one or other heathen nation promised to the people of Israel, and represented as the reparation of the wrongs which they had endured, then the possibility of such a prophecy being realized ceases from the moment that Israel loses its national existence, and thus can no longer reap the fruits of the destruction of its enemies" (p. 136). The fallacy of this is obvious. Israel sustained a twofold character. It was both a political and a religious body. It was a nation, with its affinities of race and its hereditary institutions; and it was the people of God, in covenant with him, and embracing those who feared his name and obeyed his will. These two aspects, though historically blended in Israel, were

not inseparable ; and even while they were united they might be and they were mentally distinguished. Now, nothing can be plainer than that in their promises of future good the prophets contemplate Israel, not as a nation, but as the people of God. It is their constant theme that the wicked must be purged out of Israel by divine judgments (Isa. 1 : 24 ff.) before the promised blessings can come, and the holy seed alone shall be spared (Isa. 6 : 13) ; though they were as numerous as the sand of the sea, only a remnant should return to the Lord and stay themselves on him (Isa. 10 : 20-22). It shall be well with the righteous ; it shall be ill with the wicked (Isa. 3 : 10, 11). All the sinners of my people shall die by the sword (Amos 9 : 10). There is no peace, saith the Lord, unto the wicked (Isa. 48 : 22). Their possession of the temple that was called by the Lord's name, and of the land which he had given them (Jer. 7 : 14), and the promises made to their fathers (11 : 3 ff.), would not save them if disobedient and unfaithful. It was shown to Jeremiah (ch. 24) under the emblem of the good figs and the bad figs, and to Ezekiel in the vision of his eleventh chapter, that the wicked, however they might be outwardly connected with Israel, were no real part of it (Hos. 1 : 9), and they had no proper share in the blessings that were in reserve. But, on the other hand, the sons of the stranger that join themselves to the Lord shall share the privileges of his people (Isa. 56 : 3-8). Egypt and Assyria, when they too serve the Lord, shall occupy the same relation to him as Israel (Isa. 19 : 23-25). The merchandise of Tyre (Isa. 23 : 18) shall, like every thing in Jerusalem (Zech. 14 : 21), be holiness to the Lord. Of all the nations that have provoked divine judgments, the Lord declares (Jer. 12 : 16), "If they will diligently learn the ways of my people, to swear by my name, the Lord liveth, then shall they be built in the midst of my people." "Many nations shall be joined to the Lord in that day, and shall be my people" (Zech. 2 : 11). Egypt, Babylon, Philistia, Tyre, and Ethiopia are to be accounted as native-born in Zion (Ps. 87 : 4).

On the basis of such statements, which abound upon every page of the prophetic writings, we are amply justified in affirming that the national existence of Israel was to the prophets quite a distinct thing from the existence of Israel as the people

of God. They clearly contemplated the possibility that the former might be overturned ; they over and over again positively predict that it shall be ; but the latter abides perpetual, unaffected by the ruins of the former. The national existence of Israel is no more. But the people of Jehovah, who worship and fear him, who reverently receive and obey his Word through Moses and the prophets, are more numerous than ever. They belong to every nation. They are found in every land. They are sprung from every race and family of mankind. These are the Israel of God in the true sense of the prophets, who regard not natural lineage, but spiritual kinship.

So far, then, from the termination of Israel's "national existence" having set a limit to the fulfilment of the prophecies under consideration, the enlargement of the faithful remnant of Israel by the accession of believing Gentiles is supplying the required conditions and preparing the way for a fulfilment in a fuller and more adequate sense than ever. The fulfilment began in each case with the judgment inflicted upon these nations severally by Assyria or by Babylon before Israel's political existence was extinguished, and when they could behold the avenging of their cause by the providence of God, and to some extent reap the benefits of it before the captivity or after the return. But "the meek shall inherit the earth." And the time is yet coming when these desolated seats of the ancient foes of God's people shall be occupied by those who truly fear his name.

These are the two talismans, on whose magical virtue Dr. Kuennen relies to set aside what have been hitherto ranked among the most signal fulfilments of prophecy ; and thus easily and effectually are they disenchanted. They cannot abide the test of a candid examination. It is not essential to the accomplishment of a prediction that it should take place speedily or all at once, when the prediction itself makes no such requirement. And the loss of Israel's national existence does not put an end to the possibility of fulfilling the judgments predicted on their foes. We accept without hesitation the view which he imputes to believers in prophecy (p. 135), that it is "fulfilled exactly and literally, or in another form and at another period, but still *always fulfilled* ;" though we repel the latent

sarcasm in his form of putting it, as though their only concern were to bring out a fulfilment by fair means or by foul. The truth is, that an honest interpretation of prophecy and comparison with the facts of history uniformly carries with it the evidence of a fulfilment; and this is only to be escaped by some such method as that of Dr. Kuenen, imposing arbitrary conditions not authorized by the prediction, and refusing to admit a fulfilment, however obvious, unless these are complied with.

To the predictions of Isaiah and Jeremiah respecting Babylon, with the exception of some trivialities the bare statement of which would be a sufficient refutation, he has nothing to object but "the lingering process of decay through which the mighty city passed" to its desolation so accurately foretold ages before.

Dr. Kuenen confesses that all which the book of Daniel contains respecting "Alexander the Great and his successors," and especially "the fortunes of Antiochus Epiphanes, and that prince's measures against the Israelitish religion," is strictly accurate. But then he alleges that the account of the latest years of Antiochus and all beyond that time is contradicted by the event; and its account of matters "before Alexander the Great is not only incomplete, but defective, and partly inaccurate." Hence he infers that this book cannot have been the genuine production of the prophet Daniel, but must belong to a much later date. "The writer's ignorance of these facts is at once explained if we assume that he wrote in the age of Epiphanes, and that in the year 165 B.C. But how can that ignorance be made to agree with the supposition that he was enlightened by supernatural revelation with regard to all the preceding matters? Did that revelation begin to fail him at a certain point?" But how if no such ignorance exists except in Dr. Kuenen's imagination, or must we even say it, his misrepresentation? How, still further, if the book contains clear and unambiguous prophecies, which have been undeniably fulfilled, reaching far beyond the date when he himself alleges it to have been written? His argument against its genuineness and its inspiration then falls of itself; and the admission which he has made of its correctness in relation to events

long after Daniel's time becomes a confession of a long series of predictions accurately accomplished.

This it is not difficult to show. The charge (p. 144, note 7) that, whereas Antiochus died in Persia, it is predicted (Dan. 11:40-45) that he should find his end in Palestine, is refuted by simply reading ver. 45, "And he shall come to his end, and none shall help him;" this was to be after he had planted "the tabernacle of his palace in the glorious holy mountain," but that it should be immediately after or in the same locality is neither said nor implied. An error is pretended in the 2300 days (8:14), and in the three and a half years (12:7), the 1290 and the 1335 days (vs. 11, 12); but their literal exactness is defended not only by believing interpreters as Hävernick, but even by others who, like Bertholdt and Lengerke, attach no more credit to prophecy than Dr. Kuenen himself. The statement that the writer of Daniel "knows only of four Persian kings" has no other foundation than the circumstance that he has occasion to speak of Xerxes (11:2) as the fourth after Cyrus (10:1).

The assertion that "he is in error even with regard to the Babylonian kings, of whom the last is according to him Belshazzar, the son and, as it appears, the successor of Nebuchadnezzar," is a very extraordinary one in the present state of our knowledge on this subject. Until a comparatively recent time Belshazzar was a puzzle, and the charge that the author of the book of Daniel had blundered here was freely made. No other writer of antiquity makes mention of such a prince. All who speak of the last king of Babylon call him Nabonned, or by some name so nearly approaching this in form as to be plainly identical. According to Berosus, he was not of royal descent, but reached the throne by a successful conspiracy; and, instead of being put to death when Babylon was taken (Dan. 5:30), he was at that time at Borsippa, which he surrendered without a siege, and was in consequence generously treated by Cyrus, who made him governor of Caramania, where he died. Xenophon, indeed, says that the king, whom he styles "impious," but does not give his name, was slain in the capture of Babylon. But it was the fashion to discredit Xenophon and Daniel, and to affirm that the native historian Berosus must be right. Thus the

case stood until a few years since, when the whole matter was cleared up and Daniel thoroughly vindicated by the discovery of a cylinder<sup>1</sup> of Nabonned, King of Babylon, in which he makes repeated mention of his eldest son Belshazzar (Bel-sarussur). No doubt Nabonned had associated his son Belshazzar with himself in the sovereignty. When Nabonned was defeated by Cyrus, and obliged to shut himself up in Borsippa, Belshazzar remained in Babylon and perished in the overthrow of the city. If we suppose Nabonned to have been married to a daughter of Nebuchadnezzar,<sup>2</sup> who would then be the queen of Dan. 5:10, Nebuchadnezzar could with as much propriety be called the father of Belshazzar (Dan. 5:2 ff.) as David is called the father of King Josiah (2 Chron. 34:2, 3). If now, as Dr. Kuenen would have us believe, the book of Daniel is the production, not of a contemporary and an eye-witness, but of some nameless Jew of Palestine nearly four centuries after the fall of Babylon, how comes it to pass that it alone of all ancient writings has preserved the name of Belshazzar and the memory of his existence?

Another equally unfortunate thrust at the credibility of Daniel is the charge that he "thrusts in the Median monarchy between the Babylonian and the Persian." His mention of the brief rule of Darius the Mede, which is also certified by Xenophon, and has besides such intrinsic probability under the circumstances, is another instance of minute accuracy where other historians of the period have passed over in silence a reign attended by no lasting consequences and eclipsed by the greater glory of that of Cyrus. The idea of a "Median monarchy," however, following the Babylonian and distinct from the Persian, is not sanctioned by Daniel, but foisted upon him by Dr. Kuenen for a purpose of his own. In order to bring the contents of the dream of Nebuchadnezzar (Dan. 2) and of the

<sup>1</sup> Menant, "Babylone et la Chaldée," pp. 254 ff.

<sup>2</sup> This supposition is commended not only by its perfectly reconciling all the statements in the case, and by the analogy of Neriglissar (Nergal-sharezer), the successful conspirator against his brother-in-law Evil-merodach, but likewise by the fact, attested by the Behistun inscription, that Nabonned had a son Nebuchadnezzar, who was twice personated by impostors in the reign of Darius Hystaspes.

vision of the four beasts (chap. 7) into the period preceding the time which he has fixed for the composition of the book, he maintains (p. 141) that "the four kingdoms are the Babylonian, the Median, the Persian, and the Grecian (that of Alexander the Great and his successors)." But that the Median and the Persian are not two, but one and the same kingdom, appears from the fact that the Medes and Persians are always united, both in this book and elsewhere. It was announced to Belshazzar (5:28), "Thy kingdom is divided, and given to the Medes and Persians." Under Darius the Mede the law is that of the Medes and Persians (6:8, 12, 15). The ram with the two horns in the vision of ch. 8 represents (v. 20) the kings of Media and Persia. So under Ahasuerus (Xerxes) it is Persia and Media (Esth. 1:3, 14, 18), the Persians and the Medes (1:19). And in the Behistun inscription of Darius Hystaspes we find repeatedly the same combination, Persia and Media, the Persian and Median army. The same thing appears from the nature of the case. The Median was not overturned by the Persian kingdom, as the Babylonian by the Persian and the Persian by the Grecian; but there was simply a change in the reigning monarch by peaceful legitimate succession. The four heads of the third beast (7:6) indicate the fourfold division of the third monarchy, which was true of the Grecian kingdom (see 8:8, 22), but inapplicable to the Persian.

If, now, the Medo-Persian is but one kingdom, the second, and the Grecian the third, then the fourth kingdom must be the Roman—which best suits the description, and which is the interpretation that has been put upon it from the beginning. This delineation of the character and conquests of the Roman empire, the erection of Messiah's kingdom while it still lasted, its subsequent weakness and subdivision, and the arising of a great persecuting power out of it, are predictions which were manifestly fulfilled long after the time of Antiochus Epiphanes, and which require the assumption of a divine supernatural foresight, even though the book were written at as late a period as that to which Dr. Kuennen himself assigns it; not to speak of the further prophecy of the seventy weeks (9:24-27), fulfilled in the ministry and vicarious death of Jesus Christ at the predicted time, and the subsequent destruction of Jerusalem. Can

such evidence of inspiration coexist with imposture? Can predictions such as these, the reality of which even the most advanced critical hypothesis fails to set aside, be joined in the same production with pretended predictions which are not really such, which are not genuine utterances of the prophet from whom they claim to be, but falsely issued in his name after the events had come to pass? This prediction that the Grecian empire would be succeeded by the Roman further shows that Daniel did not expect the resurrection and final judgment to follow immediately after the deliverance from the persecutions of Antiochus Epiphanes, and thus corrects the false inferences drawn from the transition in 12:1, 2. Moreover, if the book of Daniel were a spurious production, first written and published 165 B.C., and contained the extravagant and fanatical expectations imputed to it by Dr. Kuenen respecting the miraculous death of Antiochus in Palestine, to be followed at once by the coming of the Messiah and the resurrection—expectations which were falsified by the event within two years—must it not have been discredited at once? How could it ever have gained credit as the genuine work of a true prophet of God, who lived nearly four centuries before? and especially how could it have attained such speedy and acknowledged influence that the book of Maccabees, in recording the history of these times, adopts its very language and borrows its forms of expression?

In regard to the judgments predicted upon Israel, Dr. Kuenen is at great pains to represent the prophets as at variance with one another and with the facts of the case; and the methods which he employs are as extraordinary as the results at which he arrives. He alleges that neither Hosea nor Amos “expect the destruction of the kingdom of Judah,” though they clearly intimate that it shall be destroyed (Hos. 1:11; 8:14; Amos 2:5; 9:11); and this is besides a subject foreign to their theme, in which silence cannot with any propriety be construed as a denial. Amos predicts the captivity of the ten tribes, but Dr. Kuenen cavils because he does not explicitly mention the Assyrians, nor state how long it would be before the exile, and because he exhorts the people to repentance; from which the inference is drawn that he could not

have foreseen that they would remain obdurate, and that the judgments which he threatens would really be inflicted. He endeavors to show that Hosea is vacillating and self-contradictory, and finally confesses that he "does not contradict himself, if we regard his intention more than the words he employs."

Micah 3:12 predicts the destruction of Jerusalem, which was accomplished by the Chaldeans. Isaiah predicts that it shall be spared in the invasion of Sennacherib.<sup>1</sup> And this is gravely represented as a contradiction, though, to make it out, Micah's comment on his own words (4:10), "thou shalt go even to Babylon," must be eliminated from the text, and Isaiah's prediction of the Babylonish captivity (39:6) is oracularly pronounced to be spurious.

Isaiah predicts (7:7, 8) that within threescore and five years Ephraim shall be broken that it be not a people, and (v. 16) that this process of extinction shall be begun by the desolation of the land of Ephraim before a child could reach that age at which it could know to refuse the evil and choose the good. To Dr. Kuenen's mind these two passages contradict one another, though both are in exact accordance with the event—the one fulfilled by Tiglath-pileser, the other by Esarhaddon. Of the latter he rids himself in the easiest manner possible by

<sup>1</sup> Of course Dr. Kuenen makes the most that he can out of the chronological difficulty which Assyrian scholars pretty unanimously agree to find in Isa. 36:1 and the parallel passage 2 Kings 18:13. While the testimony of the monuments confirms the statements of these chapters in the most remarkable manner, and even in minute particulars, it would appear that Sargon was still King of Assyria in Hezekiah's fourteenth year, and that the invasion of Sennacherib very probably did not take place till thirteen years later. "It is impossible," he says, p. 288, "to imagine that we have here an error of a copyist; but how then can a blunder so remarkable have originated with regard to such an important fact?" His solution is that an expedition of Sargon has been confounded with that of Sennacherib, and this mingling of two separate events, which awakens a suspicion of other inaccuracies, betrays a writer long posterior to the occurrences themselves. In his opinion this narrative was not written by Isaiah himself, but has been adopted into the volume of his prophecies from the books of Kings. Consequently, "*in its present form*," it "is about a hundred and fifty years later than the events which it records" (p. 287).

Refreshing as it is to find Dr. Kuenen thus playing the unaccustomed rôle of an assertor of the accuracy of the received text, we cannot help thinking that, if the conclusions of Assyriologists be correct in this instance, the

assuming an interpolation. Allow him to expunge what he pleases, and to put his own meaning on what he suffers to remain, and he need not find it difficult to prove or disprove anything he likes.

Isaiah further predicts (7:15, 16) that Judah should be relieved from the present invasion by Syria and Ephraim within three or four years; that butter and honey, the subsistence of a ravaged country, should not be eaten beyond that time. Dr. Kuenen refers it to a subject that it has nothing in the world to do with, and makes it mean that the invasion by Assyria and Egypt spoken of in the subsequent verses of the chapter should occur within this brief interval. And then he triumphantly exclaims (p. 169): "But it did not take place. In the reign of Ahaz, and also during the first half of the reign of Hezekiah, Judah continued to be exempt from an Assyrian invasion."

Jeremiah's prediction, steadfastly adhered to from the beginning to the end of his ministry, of the overthrow of Jerusalem and the exile of the people, was confessedly fulfilled. But Dr. Kuenen tries to break its force by alleging that other prophets took a contrary view. Habakkuk's brief prophecy is wholly occupied with the judgment upon the Chaldeans; we cannot accordingly expect in it a statement of what shall befall

readiest mode of reconciliation is to assume an error in the number, and to suppose that "fourteenth" has been wrongly substituted for "twenty-seventh." It would not be difficult to account for such a mistaken attempt at correction on the part of transcribers. Hezekiah's sickness (Isa. 38:5; comp. 2 Kings 18:2) occurred in the fourteenth year of his reign. Hastily assuming the order of narration to be the order of time, and inferring a closer chronological juxtaposition from the general expression "in those days" (Isa. 38:1) than the terms really require, transcribers may have judged that consistency demanded the number "fourteenth" in 36:1, and have made the requisite emendation. But now if chaps. 38, 39 really precede 36, 37 by thirteen years—and that they are prior in order of time appears from 38:6—then a convincing argument thence arises that these chapters are original in Isaiah and borrowed thence in Kings. This inversion of the chronological order is unaccountable in Kings; while in Isaiah the whole structure of the book demands it. The entire preceding section of the book of Isaiah consists of prophecies relating to the Assyrian invasion, and is first completed by the narrative of its actual occurrence. Then the sickness of Hezekiah, followed by the King of Babylon's message and the prediction of the captivity in Babylon (39:5-7), begins a new section, containing prophecies relating to that event and the deliverance from it.

Jerusalem, and yet even here see 1:5-10. Upon this book Dr. Kuenen makes the following most extraordinary comment : " In vain do we attempt to thrust in the fall of Jerusalem anywhere into his prophecies. Habakkuk has not even a faint presentiment of it ; or rather he denies distinctly that such a catastrophe should be admitted into Jahveh's purposes." Joel of the preceding period, and Zechariah (chap. 12-14) from the period after the exile, are dislocated from their true position, affirmed on the most precarious critical grounds to be Jeremiah's contemporaries, their language applied to a matter of which they are not treating, and they are thus made to declare that, contrary to the allegations of Jeremiah, the land would not be invaded by the Chaldeans, or that the Lord would visibly interfere at the moment of the capture of the city. And to cap the climax, the false prophet Hananiah (Jer. 28) is bolstered up by being placed in such company, and represented as declaring in the name of Jehovah, with as much right to be considered his messenger as Jeremiah, directly the opposite of what the latter asserted. And on this showing it is affirmed that we have here prophet against prophet !

As for " the predictions which have reference to the restoration of Israel," Dr. Kuenen affirms, and he italicizes his affirmation, "*not one of them has been realized.*" We admit, without a moment's hesitation, that if these predictions are to be understood solely in a national and local sense, they have never yet been accomplished in any thing like their full extent of meaning. But this very fact creates a presumption against such a limitation. The judgments denounced against Israel and the nations have all been inflicted, as we have seen, notwithstanding Dr. Kuenen's contradiction. And it would be strange if in the promised blessings there is no correspondence whatever between the prediction and the reality ; and this especially as there was in the return from the Babylonish captivity an incipient fulfilment of these promises in every particular, which, as Dr. Kuenen is himself forward to assure us, the subsequent prophets recognized as " the beginning of the realization" of them (p. 194), and which they accepted as the pledge of their full and final accomplishment. There was a return from exile, though it was partial, not total ; and there was no such vast multiplication of

the people as had been promised. There was an end of the schism and of all hostility between Judah and Ephraim, though no complete union was effected of these two branches of the covenant people in one body. They were led by a prince of the house of David, but no son of David sat as king upon his father's throne ; and Israel remained subject to the domination of the Gentiles instead of themselves ruling the world. There was not the full return of the people to God, nor the abundant tokens of his favor which were promised in the blissful future.

Considered as the first stage of accomplishment, the restoration from Babylon might well be reckoned, as was done by Zechariah and his compeers, as an earnest of more to come. But in itself it plainly fell far below the prophetic anticipations, and cannot be regarded as a complete and satisfactory fulfilment of what had been foretold in such glowing terms. And Dr. Kuenen is right in insisting that these predictions are no longer "capable of being realized," if this budding fulfilment has proved abortive, and after the lapse of two thousand years there has not only been no further progress toward fulfilment, but these imagined tokens of it have themselves been falsified and obliterated by the complete abolition of Israel's national existence and the long dispersion of ages. To urge, as the only defence that can be made on behalf of these predictions, that whereas they "are not realized as yet," they "*shall be realized* some time" by "the return of the whole of Israel to their native country and Israel's supremacy over the nations of the earth in the last days," is to "contradict the explanation of the old prophecies which is presented in the Old Testament itself" (pp. 186, 196).

But whatever may still remain to be developed in the future and in whatever form, the past has not been unproductive. The promise given in the return from captivity has already been succeeded by large results. The remnant of Israel has become a vast multitude. The Son of David is seated upon his everlasting throne, and is extending his conquests among the nations ; and the blessings of his reign are unfolding themselves in the experience of mankind. The hope of Israel is realized in Christ and the Gospel. All the prophetic anticipations of com-

ing good for Israel and the world were linked with the great Redeemer and King, who was to arise from David's line.

Strangely enough, Dr. Kuenen goes groping through the whole Old Testament, and absolutely professes his inability to find any prediction of a personal and individual Messiah there at all. "The word 'Messiah' is not used in the Old Testament *in any one instance*," he tells us in emphatic italics, "to denote a descendant of David who shall reign over Israel restored" (p. 202). The promise to our first parents (Gen. 3:15) "has no connection" with this subject; "the serpent is—a serpent and nothing more" (p. 377). The promise to Abraham is not that all families of the earth shall be blessed in him or in his seed, but that "he shall be so prosperous, his posterity shall be so numerous and fortunate, that nothing better or higher can be imagined than the enjoyment of what he or his race possesses." The blessing pronounced upon Judah (Gen. 49:10) is not of the coming of Shiloh, but of the coming to Shiloh, "the common sanctuary."

Jeremiah "does not expect one single king of David's family, but an unbroken succession of Davidic kings" (p. 205). The same is the case with Ezekiel (p. 209). So, too, Micah and Zechariah (9-11): "the king whom they announce is described as one of the children of men, but therefore seems also of necessity to partake of mortality, the lot of them all." Probably in Zechariah 1-8 "the man whose name is Branch" is "regarded also by him as the first of an unbroken succession of rulers like to him." "In Isaiah also he is no supernatural being." "'Mighty God' (Isa. 9:6), viewed in itself, might have afforded some ground for the conjecture that a supernatural ruler was present to the mind of the prophet; and that the more because the same name is employed elsewhere to denote Jahveh (10:21). But this conjecture is not confirmed: all the other features point to a king of human origin." "It is possible that Isaiah attributed an endless reign to the king himself whom he expected," but his meaning more probably is "that nothing shall interrupt the regular succession of the kings of his house."

In Isaiah 40-66, "the servant of Jehovah" is commonly understood by believing interpreters to denote the true people

of God, including and culminating in the Messiah, who was to spring from the midst of them, and with whom they are here associated or identified in their mission, character, and destiny, in humiliation and in glory. This simple and obvious interpretation is demanded by the reference (55:3) to "the sure mercies of David;" it explains what Dr. Kuenen admits to be "undeniable, that the servant of Jahveh is sometimes described as if he were one individual;" it also explains how he can have a work to do for Israel as well as for the nations, and how his sufferings can be unmerited and vicarious; and it brings Isaiah into harmony with himself and with the other prophets. But Dr. Kuenen prefers to find here a diversity between the prophets: "The very remarkable phenomenon presents itself, that the expectations concerning the dynasty of David become disjoined from their proper object and are transferred to the whole people" (p. 220). He actually adduces the apparent conflict between the death and burial of the Servant of Jehovah (Isa. 53:8, 9), and his prolonging his days and enjoying a satisfying reward (vs. 10, 11), in proof that "the particulars which the prophet mentions must be distributed among the different persons who together constitute the collective number." And he alleges that "what is communicated regarding the destiny of 'the servant' does not admit of being harmonized with the description of the scion of David given by Isaiah and Micah" (p. 223).

The Son of Man, who came with the clouds of heaven (Dan. 7:13), is in his view not the Messiah, but the Israelitish nation. And Daniel's prophecy of the seventy weeks (9:24 ff.) has nothing to do with a Messiah of the house of David. The author, who is assumed to have lived under Antiochus Epiphanes, is simply describing, under the veil of prophecy, what had already taken place. Jeremiah 25:11, 12; 29:10, had assigned the term of seventy years to the desolations of Jerusalem, and this had been strictly fulfilled according to Ezra 1:1; 2 Chron. 36:22. But this imaginary author is supposed to have thought otherwise, and accordingly to have conceived that Jeremiah must have meant, not ordinary, but sabbatical years, or weeks of years, and to have developed in vs. 24-27, his conception of that prophecy and his adjustment of it to what had taken place

down to his own day. "The going forth of the commandment to restore and to build Jerusalem," which is (v. 25) the starting-point of the seventy weeks, is alleged to be Jeremiah's prophecy already referred to, though this relate to an entirely different matter from the building of Jerusalem—viz., the period of Babylon's domination and of Israel's subjection and captivity. From this prophecy in the fourth year of Jehoiakim until "an anointed prince," who is not the Jewish Messiah, but Cyrus, is declared to be "seven weeks," or 49 years; though in actual fact, and according to the biblical reckoning, it was 70 years (a computation which is implied even in Dan. 9:2), the discrepancy being laid to the account of ignorance in the writer. After sixty-two weeks more, or 434 years, "Messiah is cut off," not the Jewish Messiah, nor Cyrus as before, but the high-priest Onias. In reality Onias was murdered 365 years after the first of Cyrus, leaving an error of 69 years to be accounted for as the preceding. This is further aggravated in the present instance by the allegation made in a different connection, that the writer knew of no Persian king later than Xerxes, and that he imagined him to be the antagonist of Alexander. The deficit is thus swelled to 200 years, and it becomes necessary to assume that he assigned 362 years instead of 162 to the empire of Alexander and his Syrian successors preceding the death of Onias. And this enormous blunder is committed in a period with the details of whose history he shows such familiarity in chap. 11, that mainly on this ground the book is pronounced spurious and its date fixed during the persecutions of Antiochus! And all this to escape the plain reference of the prophecy to the advent of the Messiah. Can any one be so blind as he who is determined not to see?

Two things remain to be accounted for after this total abstraction from the Old Testament of the doctrine of the Messiah, and especially the disappearance in the latest prophets of any expectation even of a revival of the dynasty of David. One is that prophecies which are so destitute of any reference to the Messiah should ever have given rise to the expectation of his coming. Another is that they all admit of such ready application to Jesus Christ.

Dr. Kuenen objects that to find in Christianity the fulfil-

ment of the prophecies respecting Israel is to "spiritualize" them, and thus give them another than their real meaning. We reply, on the contrary, that with some diversity in outward form and incidental circumstances there is nevertheless the closest adherence to the essential meaning of the prophets. The fact is, as Dr. Kuenen states it (page 188), with the view, not of recommending, but of disparaging the current opinion on this subject: The prophecies of the Old Testament are "*more than fulfilled*, or in other words, the reality under the New Testament dispensation *far surpassed* the expectations under the Old."

The prophets everywhere recognize and insist upon the distinction between the outward forms of the Old Testament and their inward spiritual meaning. Isaiah declares (1:11-20) that it is not sacrifices and burnt-offerings, oblations and incense, treading God's courts, new moons and sabbaths, feasts and assemblies, that God requires, but purity of heart and life, and obedience to his will. When now he speaks (2:2-4) of the nations hereafter going up to the mountain of Jehovah, to the house of the God of Jacob, it is plain that the external act of pilgrimage to that locality does not exhaust his thought: it is in fact a very subordinate part of it. Its only value or meaning to him is as the legitimate mode of expressing his essential idea that these nations would pay their worship to the God of Israel, would be taught by him of his ways, and would walk in his paths. And if any other mode of doing this is equally legitimate and acceptable to the God of Israel, who will say that it does not as perfectly meet Isaiah's expectation and correspond to his thought?—especially as a figurative character is given to this whole representation by its opening words. Dr. Kuenen himself says (p. 247): "The prophet may be understood to have meant figuratively what he says about the exaltation of Zion on the top of the mountains;" but he adds, "On the other hand, the pilgrimage to the temple on Zion must be understood literally. . . . We should deprive the prophecy of its meaning and force if we attempted to explain it spiritually." There is nothing to justify this assertion, or the arbitrary line here drawn between what is figurative and what is literal, unless it be the positive air with which it is done.

The same prophet, or, according to Dr. Kuenen's critical hypothesis, another prophet in a later age, declares (Isa. 66: 1-3) that heaven is Jehovah's throne and the earth his footstool; man can build him no fitting house; the offering of oxen and lambs and incense is a crime and an abomination to him, except as joined with and expressing inward piety; he regards with favor only him that is humble and of a contrite spirit, and trembleth at his word. He then adds (ver. 23): "And it shall come to pass that from one new moon to another, and from one sabbath to another, shall all flesh come to worship before me, saith Jehovah." Apart from the physical impossibility of weekly and monthly pilgrimages from all parts of the earth, even if this be limited to lands then known; apart also from the fact that this is greatly in excess of the requirements of the law, which enjoined pilgrimages to the sanctuary but thrice in the year, at the annual feasts—is it not plain that the stress is laid upon worship before Jehovah? The sacred seasons and the central sanctuary are simply referred to as the authorized place and times of acceptable service. If the same authority which had hitherto required them should hereafter dispense with them, of what account would they be in the prophet's eyes? It is to "worship in spirit and in truth" that his thought was directed, and not to worship in Jerusalem, except as the divinely prescribed place of a true and spiritual adoration.

Jehovah's worship, though for the time then present it had a local seat, was not, in the judgment of the prophets, bound to any one place by an indissoluble tie. The worship of their father Abraham, who was the friend of God (Isa. 41: 8), was untrammelled by any fixed locality. The place for the sanctuary was "the place that Jehovah should choose" (Deut. 12: 5). Jeremiah speaks of God's doing to Jerusalem as he had done to Shiloh, which he had abandoned (7: 12-14; 26: 6). He looks forward to a time when the ark of the covenant should not be remembered nor missed (3: 16), and God's new covenant should be written in their hearts (31: 31). Ezekiel in vision saw the glory of Jehovah forsake the temple and the city (11: 23), and God himself promised to be a sanctuary to his exiled people in the countries where they shall come (v. 16).

And yet when a prophet, who so clearly distinguishes between the shell and the kernel, depicts the temple and the service and the holy land of the future, Dr. Kuenen insists that this must all be literally understood because of its "copiousness and entering into minute details" (p. 240). And the life-diffusing stream from the temple (Ezek. 47), which forms a part of the same picture, was in the intention of the prophet "an actual stream," because the description is "so exact and detailed" (p. 234), though the corresponding streams spoken of by Joel 3:18 and Zechariah 14:8 are admitted to be figurative. We are prepared to hear him say next, for a like reason, that the cherubim so minutely described (chap. 1) were actually existing beings, wheels and eyes and all; and the eagles of chap. 17 were literal eagles; and the women of chap. 23 literal women; and when the restoration of Sodom and her daughters is promised (16:53-61), the prophet expected the buried city of Sodom to be brought up from the bottom of the Dead Sea and restored to its former condition. He could still silence all objections by the same plea that he uses now (p. 242): "What we should almost designate as fantastic is evidently in complete accordance with his (Ezekiel's) ideals."

Dr. Kuenen himself points out (p. 191) the close connection between the ideas of the return of Israel to Canaan and their conversion to God. A return to Palestine without conversion to God would not be what was in the prophets' mind and heart. And it is only as Palestine was Jehovah's land that returning to it had any religious significance. A return to God and the enjoyment of his favor and blessing is the essential thought, and Canaan is but the outward form in which that favor was for the time concentrated.

Moreover, descent from the patriarchs is not with the prophets the constituent principle of the people of God. Participation in the blessings promised to Israel is not determined by lineage or by nationality, but by inward character and spiritual relationship. "Ye are not my people," said Hosea (1:9), speaking in the name of Jehovah to the ungodly Israelites, "and I will not be your God." The prophets with one voice denounce the judgments of God upon the sinners in Israel. The wicked mass must be purged away; they have

no part nor lot in the good things to come ; it is only the pure remnant that are left for whom the promises are made. Ezekiel (11 : 15) was instructed to recognize "the whole house of Israel" in the exiles, to the disregard of the degenerate inhabitants of Jerusalem, who were abandoned of God and given over to destruction. And, on the other hand, the stranger that hath joined himself to Jehovah need not fear separation from the Lord's people (Isa. 56 : 3). And when (Isa. 19 : 25) "Jehovah of hosts shall bless, saying, Blessed be Egypt my people, and Assyria the work of my hands, and Israel mine inheritance," what has become of national distinctions?<sup>1</sup> How can even Dr. Kuenen, with any consistency, refuse to recognize in Christianity the universal worship of Jehovah predicted by the prophets, when he imputes to Malachi such an excess of liberalism that when he speaks (Mal. 1 : 11) of the incense offered to Jehovah's name in every place, "he is thinking of the zeal and sincerity with which the nations served their gods ; he, convinced of the unity of Jahveh, regards their worship as being properly destined and intended for the one true God."

We have not adduced the authority of the New Testament, which is abundantly and decisively given upon this point, because this has no weight with Dr. Kuenen. We have interpreted the meaning of the prophets in this matter by their own utterances. And themselves being judges, no bar is interposed to the recognition of the fulfilment of their prophecies by the changes which have taken place in the outward forms of worship, or in its local seat, or in national relations. The prophets may not have been aware of the changes which Messiah's coming would introduce. There were wise reasons why the temporary nature of the Old Testament institutions should not be prematurely disclosed. But while the temporary form, in which their ideas were clothed, has been stripped away, the ideas abide in their unchanging reality and truth. All that was essential in the prophets' own estimation, and much more and better than they hoped or knew, has been accomplished in Christ and the Gospel.

<sup>1</sup> See the passages of like tenor quoted above, p. 33, and numerous others in the books of the prophets.

We have now examined *seriatim* every prediction classed by Dr. Kuenen among the “unfulfilled prophecies,” whether relating to the Gentiles or to Israel. We believe that no objection, great or small, that he has brought against them has escaped attention. And we are willing to submit it to the candid reader whether he has made out a case in any one instance.

Upon this flimsy basis rests the entire argument contained in the volume which we are examining, every thing else being subsidiary and supplemental. The remainder, though offering abundant and very inviting matter for comment, must be despatched in a very few sentences. Dr. Kuenen seeks to rid himself of the prophecies which he confesses to have been fulfilled in three several ways.

1st. By appealing to the non-fulfilment of others, which he claims to have established; with what justice we have already seen.

2d. By the legerdemain of modern criticism, which peremptorily waives aside any witness that it is not convenient to hear, and which is ever ready to suspect the genuineness or the accuracy of the text upon grounds which, in their last analysis, cover an assumption of the very point to be proved—viz., that prophecy is impossible.

3d. By the gratuitous and unfounded allegation of bad faith on the part of the prophets themselves. He distinctly charges Jeremiah and Ezekiel in particular with having modified their predictions after the event, so as to make it appear that they had minutely and accurately foretold what they never had foretold at all. Thus he says, in regard to the latter prophet (pp. 328-330): “The passages of Ezekiel explained above contain *no real predictions*. Whatever he may have *spoken* to his fellow-exiles in the years preceding the destruction of Jerusalem, he has *written* the prophecies which we now possess *after that catastrophe*, without troubling himself in the least about literal reproduction of his oral preaching.” “Though it may be impossible to reconcile such a method of procedure with our notions of literary good faith, yet it was not uncommon in ancient times, and specifically in Israel.” “They are not real predictions, but historical reminiscences in a prophetic form, *vaticinia post eventum*.” He would accordingly have us suppose

that these prophets falsely claim in their writings to have uttered time after time the most astonishing predictions, which met in every case a literal and precise fulfilment ; and yet their auditors, who must have known the falsity of this claim, at once accepted these writings and handed them down as true prophecies received by inspiration from the mouth of God. We confess that we are of Dr. Kuenen's own opinion with regard to this expedient of his (p. 328) : " Many will at once be inclined to reject it as—a subterfuge, by the help of which I try to escape from the dogmatical conclusions to which the literally-fulfilled prophecies of Ezekiel ought to have led." And how does this assertion, that Jeremiah and Ezekiel altered and retouched their predictions to make them correspond with the event, comport with what he maintains elsewhere, that both these prophets have included among their writings predictions (*c.g.*, respecting Tyre and Egypt) which had been glaringly and notoriously falsified in their own day, and that Ezekiel admits it without being in the least disturbed thereby (p. 110) ?

The accounts given of the prophets in the historical books are swept away in the most summary and relentless manner. He admits (p. 401) that the predictions of " the prophets of the historical books extend far beyond their political horizon, are characterized by definiteness and accuracy, enter into the more minute particulars, and are all, without distinction, strictly fulfilled." But the narratives containing them are in his esteem utterly untrustworthy. " They are, *in the first place*, a reflection and striking representation of the religious belief of their authors, and only *in the second place* are they testimonies regarding the historical reality. This reality is *nowhere* to be found perfectly pure and unmixed in these narratives, in so far as they are any thing more than dry chronicles ; it is *always*, though in a greater or less degree, colored by the subjective conviction of the narrator." " *The representation given of the prophets and prophecy in the historical narratives of the Old Testament is no testimony regarding, but is itself one of the fruits of the real Israelitish prophecy*" (p. 436). " While the prophetical historians sketched the past of Israel, they not only felt themselves compelled to labor for the religious education of Israel, but they thought themselves also justified in making their description of

Israel's fortunes subordinate and subservient to that object. The considerations which would restrain *us* from treating history in such a manner, or would impede *us* in doing so, had for them no existence" (p. 443). In other words, Israelitish history is a pious fraud, concocted by the prophets from first to last, and this in spite of the exalted respect which he professes for their character and work!—and nothing whatever in it is to be credited but just what the critics tell us may be credited. Here is in a nutshell the principle and the method of all Dr. Kuenen's critical processes and results. He blows his subjective soap-bubble to whatever size he may fancy, and dances it before his readers in its variegated beauty and apparent solidity and readiness to burst.

It does not embarrass Dr. Kuenen in the slightest degree that the New Testament throughout "ascribes divine fore-knowledge to the Israelitish prophets." He very naively says (p. 448): "Its judgment concerning the origin and nature of the prophetical expectations, and concerning their relation to the historical reality, may be regarded as *diametrically opposed* to ours." His elaborate attempt to show that the New Testament writers are guilty of inaccuracies and mistakes in quoting from the Old Testament, and that they misunderstand and misinterpret it, merely proves what was superfluously clear beforehand, that their conception of its meaning and spirit is radically different from his. Its chief value consists in the practical demonstration which it affords, that they who reject the inspiration and authority of the Old Testament, or any part of it, must by inevitable logical necessity reject likewise that of the New.

Dr. Kuenen sees in prophecy simply a deduction from the prophets' own religious convictions. Jehovah's purposes are inferred by them from their thorough persuasion of his inflexible righteousness and his sovereign choice of Israel to be his people on the one hand, and the judgment which they entertain of Israel's existing moral state or the character and conduct of Gentile nations on the other. Hence "the prophetical prediction of the future" is, as he states it (p. 359), the necessarily incorrect conclusion drawn from premises which themselves were only half correct. This naturalistic hypothesis falls with

the failure to prove the non-accomplishment of the predictions of the prophets. If, as is really the case, what they have foretold has unerringly come to pass, prophecy is thereby shown to be the word, not of him who knows not what a day may bring forth, but of Him who "declareth the end from the beginning." It is the word, not of man, but of God. And it is plainly futile to attempt to account for it on natural principles—as, for example, that Jeremiah's strong faith wrought upon the exiles, and their faith wrought upon Cyrus, who by a lucky chance appeared just at the right time and became the conqueror of Babylon (p. 315), and thus brought about the return from captivity after seventy years; or Isaiah by his faith persuaded Hezekiah and his people to persevere in their resistance to Sennacherib until fortunately the plague swept off his army (p. 298). On this principle such a chapter of accidents would be required to save the credit of the prophets as would involve that very supernatural intervention which the hypothesis was invented to escape; and that, too, in a form far more incredible than the simple faith of ages, that "prophecy came not in old time by the will of man; but holy men of God spake as they were moved by the Holy Ghost."

WM. HENRY GREEN.

## THE PROBLEM CONCERNING THE HUMAN WILL, AS RELATED TO SCIENTIFIC AND PHILOSOPHIC THEORIES.

THE study of man has become a pressing demand in our times. Whether we turn to the circle of physical sciences on the one hand, or to schemes of mental philosophy on the other, it is obvious that a full and systematized knowledge of human nature has become a first requisite for physicists and philosophers alike. Science, with its observational and inductive methods, claims to encompass the universe of known existence. Philosophy, with these same methods, and the use of speculative reason besides, claims to reach unity beyond and above the multiplicity everywhere apparent. The observation of which science boasts may be a narrower thing than the observation which philosophy declares to be essential for a true knowledge of the universe as such, if we are to seek a scientific knowledge in any strict and thorough sense. Consequently, the universe of science may be a narrower thing than the universe of philosophy. But it is to be constantly kept in view—and specially by those who look at the products of human inquiry from a philosophic standpoint—that the facts on which physical science rests are patent to all, that her methods are recognized by all, and that results are most unhesitatingly received by all as soon as it is made clear that they are direct results from rigid use of scientific methods applied to ascertained facts. I have said that these things should be specially kept in view by those who are watching the progress of human thought from the standpoint of mental philosophy. It were earnestly

to be desired, however, that it be remembered by scientific men themselves, who spend a large amount of time and strength in needless outcry against opposition to science. Conflict there may be, sharp and prolonged, both within the territory of separate sciences, and over the boundaries of science and philosophy. It is through such conflict that progress is gained. But to speak of opposition to science itself is ridiculous. If, by some strange chance, such opposition might be offered, it could not rationally afford ground for conflict.

Much more important it is that we should endeavor to ascertain what the so-called conflict between science and philosophy really amounts to. There is, and there can be, no dispute over such fundamental positions as these, that facts must afford the basis for all inquiry, and that legitimate induction from such facts must be accepted by all intelligences. And if these things be granted, there must be scope enough for scientific and philosophic progress, without restriction from any source, save the conditions of human intelligence itself. Where conflict may be anticipated is obvious. It may sometimes be over facts, sometimes over theories, but most seriously over the *former*; for the most perplexing part of the task is to bring out beyond all question or reasonable doubt what are the facts to be explained. This may be profusely illustrated at the present juncture by reference to many pretentious hypotheses. No one can reasonably challenge the right to launch hypotheses; but these must cease to be hypotheses before their history can be identified with the progress of science.

In these few preliminary sentences I am only requesting attention to the recognized conditions under which all our investigations proceed. And, in doing so, I seek to point out that there is identity of method, whether men are devoted to the service of science or of philosophy. Perhaps some may, on this account, be disposed to insist that there is no distinction between science and philosophy. To this suggestion I offer no objection so long as it is intended that the remark should apply to the method of procedure, making allowance for distinction of area. If we speak equally of physical sciences and mental sciences, there can be no strong objections adduced. As little could there be if we speak equally of a philosophy of physical

existence and a philosophy of mental. There can be nothing but convenience, supported by historical tradition, to account for the broad distinction between science and philosophy.

I have said that a great want of our times, in order to test at once science and philosophy, is a knowledge of human nature. I point to a full and systematized knowledge of human nature, as this is to be reached through exhaustive analysis of experience, and also by summary of the latest and surest results attained by anatomical and physiological research. I venture to submit that such knowledge is a want of the times, not merely on the ground that people generally need much enlightenment on the matter, but that this want still exists even in the case of those who are competent guides of others on distinct divisions of the great subject. Scientific men need to come into fuller possession of the results of analysis of mental experience. Philosophic thinkers, devoted to the study of all that belongs to mind, need to allow for a more extended study of the nerve-system, with its great centre and extended ramifications. If scientific men declare that human nature, as well as all subordinate organism, must come within the sweep of scientific inquiry, we have no opposition to offer to the allegation. But we have to suggest that science comes up with a more difficult task here than it has ever encountered before ; and all men are in possession of a large amount of material with which to test results. This piece of work is not to be done in the laboratory, or by geological expeditions, or by dredging parties on quiet waters, or by the most detailed observations in natural history. Nor is it to be got through by bringing any amount of fibre and tissue under the microscope. All work in the departments named has its own place and its recognized value. But when it is proposed to include human nature within a scientific account of known existence, human nature itself must be studied, and this is the hardest piece of study which scientific men have faced. When Huxley began to study and expound Descartes' "Method;" when Darwin advanced to account for the general acknowledgment of moral distinctions among men ; when Tyndall went forward to treat of "the interaction of social forces;" when Haeckel followed Darwin back to a point in the history of creation where could be seen the origin of a

*priori* knowledge by inheritance—scientific men came upon new ground. To this ground they are all heartily welcomed. But I apprehend that those who have been longest on the ground, and are most familiar with it, will agree in the judgment that, even when taken all together, scientific men have done little more than make a beginning. In the hands of no one of the number has the ploughshare gone deep into the ground. It has come out on the surface oftener than it has struck into the subsoil ; and it is subsoil ploughing which is specially required here. Scientific men who would give us a science of the universe, including all that pertains to man, must offer us a science of the conditions of human knowledge, going to the root of all our tests of certainty. They must give us a science of moral distinctions, accounting for the recognition of a peculiar phase of law, applicable only to human life in contrast with other orders of life in the world, and admitted by men to have a kind of authority which is not otherwise known. They must give us a science of human action as distinct, or at least generally regarded by men as distinct (and so accounted of in our friendships, in our business transactions, in our law courts and elsewhere), from the action of physical forces, such as water-power, steam-power, or electricity ; and from animal impulse, such as the craving of hunger, fear of danger, or rage against an adversary. Without underestimating the wide area already occupied by the sciences, there is a vaster territory here than the whole region which science at present commands. There is more in man than in all the world besides. The greatest mystery of the world is just there, where all else in the world becomes intelligible, and where that which is higher than the actual is contemplated as possible. Professor Bain will say that this is ministering to human vanity, in order to give a semblance of superiority to human virtue. But a statement concerning the perplexities of human knowledge and volition does not in the first instance concern either vanity or humility. We need to make some effort to marshal the facts that are to be explained. After they are set in order, and a scientific explanation of them formulated, we may ask whether the facts themselves, taken with their scientific explanation, minister to vanity, or set in clearer light an awful responsibility. But

ulterior results must be at a discount, while we are occupied with the first requisites for a safe beginning. What are the facts?

As a proper discrimination of the facts must be the first requisite for testing scientific hypotheses and promoting true scientific progress, I propose to turn attention upon that class of facts which illustrates the specialities of human action. I wish to consider the will-problem as that rises up before us when we attempt to reach some scientific explanation of human actions. We are in some things at least like the animals in our actions. How far are we like them, and in what ways? We are in other respects unlike the animals in our conduct. How far does ascertained dissimilarity separate us from them? Just behind these questions may rise the other, How far is the hypothesis feasible that human nature is only a development of lower orders of organized being? This later question we are willing to leave out of sight for the present, while we endeavor to make clear what are the facts to be explained.

When it is said that we do in some respects act as the lower animals do, there is at least one set of facts clearly pointed to—that is, all those actions which show that men live under the dominion of physical desire or craving. By sheer waste of tissue the organism craves the nourishment which may make up the loss. This fact is so commonly recognized that we accept it as typical, and hold it to be true of all sentient organism. So it is with the appetites generally. From this beginning, apparently warranting a "natural-history method," we may go on to actions of the lower animals which indicate contrivance, or adjustment of means to ends, as in nest-building, or mastery of difficulties which hinder self-gratification. Thence we may pass to record what we see of the progress of animals under training. Next we may dwell on the effects of repetition, thereafter upon persistence of result by hereditary transmission; and thus making a large draft upon time—rather indefinite in its statement of amount—we may evolve a theory of development. No reasonable objection can be offered to this line of procedure. And we make no complaint that man himself is included within the area of scientific investigation. Man is on the line of procedure, and must be reached on that line. Either human nature must be included, or the theory itself must be

contracted in its form, and must declare itself something less than a theory of the universe. We, therefore, make no outcry against the attempt to include man within the range of one great law of existence. But scientific men must admit that their difficulties are vastly increased as the attempt is made to rise to the level of the highest or governing order of being in our world. At the same time it is needful to keep in view that it is the part of those who have devoted themselves to mental philosophy to set forth these difficulties in all their magnitude. In performing such distinct parts, it may seem as if inquirers after truth were in conflict, yet here is only such conflict as is needful for progress. It may even appear as if one class of investigators were obstructives in the way of another. But scientific men will not fail to remember that an easy victory is no victory. He is not the friend of truth who makes light of the difficulties to be met in constructing science. All the interests concerned are in danger of suffering from facility of assent.

It is well, then; to condescend expressly on the fact that such a theory as that of development, in whatever form it may be presented, does not rest completely on observation, and induction from such observation. It does not profess to have met the requirements of a rigid scientific method. It is not to be studied as if it made this profession. It is neither to be accepted and defended as if it had done so, nor is it to be criticised and assailed on this assumption. I am well aware that there is at present a very frequent repetition of the statement that the theory of development of species is all but universally accepted by scientific men. And I do not press at this point the inquiry whether we have not in the easy utterance of such statements numerous examples of facility of assent among scientific men. I merely point out that the statements as made are not generally explicit as to the avowed inclusion of the human race; and that they do not claim for the theory the honor of demonstration on the ground of observation and consequent induction. The theory at best belongs to a region of scientific belief. And it is not only a natural thing, but even necessary, that science should have such a region, thereby availing itself of the legitimate aid of rational hypotheses, without risking too much under name of science. It is further in obvious harmony

with the scientific spirit, that the theory, though avowed simply as matter of belief, should still be regarded hopefully, on the ground of a considerable mass of evidence having been accumulated in its favor. No one maintains that truth is restricted to observation ; no one denies that observation itself may be greatly extended ; and no one can on rational warrant insist that we may not legitimately reason towards probable results by the aid of hypotheses which so far vindicate a right to existence by carrying along with them some measure of *prima facie* evidence, though that evidence be far from sufficient to gain general assent to the theory.

But all this being admitted, it is granted, and even required, that all the facts be brought up into clear position, in order to make patent the full range of scientific demand. The science of the present day requires more than any thing else that the facts of human life be set in distinct array. In these lie its real test. And it is in view of this that I offer here a small contribution in the form of an analytic account of one class of facts—namely, that connected with the exercise of the human will. It is granted on the scientific side, and so is it on the philosophic, that it is not within the range of possibility to trace the rise of what we now denominate will-power, either in the history of the race as a whole, or in the history of the individuals of the race born after our time, and constantly under our observation. The remote past is beyond the reach of observation and experiment. The advancing experience of childhood is so shrouded from view, and so confused in the region of self-consciousness, that very little can be gathered from it to meet scientific requirements. It must, therefore, be granted here, as it has been granted in connection with the theory of human knowledge,<sup>1</sup> that we must take human nature as it is, and seek by analysis the simple or primary elements in our experience. This I propose as the order of inquiry as to the exercise of will. Scientific men will, I should think, acquiesce in this order as natural and proper. As engineers preparing to bring in water-supply will first survey the levels and ascertain that there is no insurmount-

<sup>1</sup> As, for example, by J. S. Mill as an upholder of a development theory of human knowledge.—*Exam. of Hamilton*, p. 171.

able obstacle in the contemplated course, so will scientific inquirers account it a needful piece of work to survey the more difficult parts of the ground to be passed.

As I am anxious in the first instance to meet the requirements of physical science, I select illustrations on a line suited to this purpose. Starting from the external, we shall most clearly work towards what belongs to the internal. In organic sensibility there is provision for stimulation of organic action. This is the lowest phase of action in animal life. Touch a worm, however gently, and it shrinks. A shrill whistle arrests the attention of the dog running along the road, or of the oxen in the neighboring field. They will simultaneously look in the direction from which the sound comes. Going a step farther with our observation, the least infliction of pain induces action. The slightest puncture of a pin will be followed at once by withdrawal of the hand. Such action is properly said to be involuntary, inasmuch as it does not belong to that class of actions of which we speak when we refer them to the will. They are spontaneous. There is store of energy in the organism constantly liable to stimulation in this way. Such action is reflex—that is, it is accounted for by stimulation of a nerve of sensation in communication at some centre with a motor nerve, by stimulation of which action naturally results. This discovers to us a whole circle of actions whose cause is external to ourselves, and whose condition is found in the sensibility and motor power of the nerve system. In respect of such actions it must be said that they are common to all organism, and shed no light on the specialities of human life. My present purpose does not require that I should dwell in detail upon the mechanism by which such action is accomplished, or the physiological laws under which it takes place. It is enough to note the fact that, in common with other sensitive organisms, man is acted upon by external influences, and necessarily acts under their sway. Whether there be not in the case of man some very marked limitation of what may be described as subjection to external nature, such as does not hold good in the case of other animals, is a question which may afterwards arise.

Besides the purely reflex action, provided for by the nerve-system and the stores of nerve-energy generated within the

body, there is a class of actions common to animal life which have their source in a distinct disposition or internal impulse belonging to the nature. I need not further refer to the appetites, already incidentally mentioned. But, keeping up still some connection with influence from without, I may refer to fear and anger as powerful forces contributing to the determination of human action. These two forces, if they do not belong to all organism, appear very low in the scale of being, and thereafter manifest themselves up the whole scale. Hence our familiarity in the history of animal life with flight from danger on the one hand, and attack on the other. And it is obvious that these two perform a most important part for the preservation of life. But we notice that fear and anger have different relations in individuals of the same order. You see this in the same nest of fledglings. When you approach the cage one looks at you with perfect composure, the other crouches immediately. So in the history of cage life, one bird is irritable and always ready for fight ; another is not easily stirred up to anger, but gets out of the way of the offender. That there is diversity of nerve sensibility in such cases is beyond doubt. But these two impulses, fear and anger, operate equally in man and in lower orders of beings. And in so far as we can trace action merely to one of these impulses, we may find in human conduct, as in mere animal life, illustration of the overmastering force of what, notwithstanding a certain element of discrimination involved, we may still denominate blind impulse—that is to say, such force is blind in respect of the higher sight which we know belongs to our own intellectual nature. Whether man can govern these two impulses, as the lower animals cannot, is an after-question, introducing to the interesting problem of Plato concerning the relation of the irascible nature to the appetent.<sup>1</sup>

Fear and anger, though operating within the being, imply that the sensitive nature is operated upon from without. While, then, these two impulses discover internal forces determining external action, these forces are brought into play by external influences. Whether there is clear evidence of an

<sup>1</sup> " Republic," iv. 439-442.

ascending scale of being in a steadily increasing possibility of both fear and anger, as you pass from lower to higher organism, is an important aspect of the inquiry, to which I cannot give space here. It is needful to pass at once to actions which have their source within, and quite apart from the direct agency of external influences. That it may be difficult to ascertain whether there are in the case of the dumb animals any such actions other than those which spring from appetite, is a consideration which may leave a degree of uncertainty attaching to the account which naturalists can give us of the conditions of animal life. But such uncertainty, if it be chronicled, does not present any obstacle to our procedure; for it is well known as matter of every-day experience, that there is a large number of the actions of men which cannot be explained by the instrumentality of external influences. It is needless to multiply examples at this transition point. Illustration is found in such as these. Attention is given to an appointment, when external circumstances operate in a manner calculated to make us overlook it—attention which discovers a register within of things past, and account being made of the flight of time. The question here is not, have animals memory as well as man; but is there in the case of men a use of memory for the guidance of action of which we have no semblance among the lower orders of being. Toil is continued when the toiler is weary and the task is irksome. The question is not whether this same thing is not very common in animal life. The question concerns the absence of whip-cord, and the presence of something which is not explained under the recognized conditions of bone, muscle, and nerve. I might go further, and also rise higher, in the scale of illustration, but there is no need at the present stage in the discussion.

The fact now before us, when stated in the most general way, is this: there are in the case of men actions which originate altogether from within. If we wish for a little longer to keep the matter within the range of vision we may refer to physical movements, and thus far restrict our use of the word *action*. This restriction cannot be long maintained, but it may serve an important purpose. To suit the limitation, the fact may be stated in the words of Professor Bain, there is "movement with-

out stimulation of sensible objects."<sup>1</sup> This carries us at least within the organism itself, and presently, as we shall see, a good deal farther. We have already touched on actions springing from common physical appetites, and we may carry our inquiry beyond this sphere. A person sitting in his chair, with open book in hand, having one limb crossed over the other, sways the pendant foot back and forward while he continues his reading. You notice while he reads that the movement sometimes becomes slower and more measured; sometimes it ceases entirely; suddenly it is renewed again with great energy. By and by the book is thrown down, the reader steps across to the book-shelf, returns with a volume, consults it, restores it to its place, and comes again to his seat to resume perusal of the book first laid aside. These two examples of movement are comparatively clear from entanglement with association of ideas, of which so much is made in the attempt to construct a theory of knowledge, and which I wish to keep as far as possible out of view in this paper. The two examples illustrate two quite distinct classes of movement. Both presenting movement of limb, the movements are very similar, and there is some advantage in this. They have so much in common that they afford a good opportunity for marking off the element of difference. So far as the observer would remark on that difference, he would say that the first movement appears purposeless, whereas the second is movement with a clear purpose in view. Considering matters a little more closely, it appears as if the movement of the foot, in the first case, is something of which the reader is quite unconscious. And yet there is some measure of self-regulation in it, for it is when the contents of the volume awaken more interest in the reader that the movement becomes slower; it is when they occasion some perplexity that the movement stops; and it is when the perplexity is over that the movement begins again with its former velocity. On the other hand, the movement in the second case is not merely connected somewhat with that which we describe as mental occupation, but it is in the very line of it, and a formal production from it. Without reference to the mind's occupation at the time, you

<sup>1</sup> "Mental Science," p. 14

can give no account of it. Hence it happens that the observer can see nothing to explain the sudden movement, and can understand it only as he sees the end it is serving. It may be that the scientific man is ready to object against my reference to the mind's occupation, as if there were a distinct phase of existence, to be named "mind," and to be distinguished from body. I am not, however, greatly concerned as to phraseology whilst in progress towards a theory, provided only it be noticed that there are two distinct examples of action to be accounted for, and that in attempting this we must pass into the inner circle of our own being, and ascertain by experiment, as far as this can be done, how these two movements are effected. If study of the human organism bring out an explanation of the whole, scientific requirements are satisfied. But if such study do not answer our inquiries, the "science" of human nature must enlarge its boundaries. Now, so far as physiological investigations carry us, the explanations of the two movements are exactly the same, or almost entirely identical. If there be a slight difference, it is in the form of a fuller explanation of the first or purposeless movement, whereas what we really need in order to get at the specialities of human action is a fuller explanation of the second movement, which is carried through with a distinct end in view. This will appear as investigation proceeds.

The main contribution of science concerns the mechanism, and the vital energy by which that is set in motion; and this double explanation applies to both cases alike. From the nerve-centre in the brain, passing down through the spinal cord, and extending to all the muscles of the leg, there are motor nerves, by means of which the muscles are controlled and movement of the limb effected. So much for mechanism. In the gray matter which is massed at the centre, and extended in considerable portions down the nerve-system, and within which are myriads of cells, there is generated the nerve-energy, which gives vitality and active efficiency to the whole system. So much as to the motive force by which the movement of the limbs is accomplished. A discharge of nerve-energy influences the motor nerve, and provides for the movement. Such discharge involves a molecular change at the centre, and requires that there be continual blood supply in

order to afford nourishment, thereby contributing material for generating fresh stores of nerve-energy. All this being stated, it is plain that the movement of the limb is mechanical action, and nerve-energy is the motive force by liberation of which from the centre the movement is kept up. Now all this applies equally to both cases of movement under attention. Whether you contemplate the movement of a single limb swaying to and fro while the reader is absorbed with the contents of the volume before him, or notice the new direction given to the nerve-energy, setting both limbs in motion, while the reader goes in search of another book, the whole scientific explanation, briefly sketched above, is required to account for what happens. Science, so far as its results are here given, explains the one movement just as it explains the other. So far as mechanism is concerned, and so far as motive force is concerned, the science of muscular motion is one. But the two movements are thereby explained only in so far as they are similar; in so far as they are dissimilar, the dissimilarity is not accounted for. Considering exclusively what the agent himself has to do with the swaying of one limb, and with the use of both in walking, nothing has been scientifically explained except that there is within the organism mechanism capable of work and motive force to put it in operation. But it is not explained to us how it happens that one limb is kept in motion for a time, and how it happens that this is suddenly stopped, and both legs put into active use. The scientific question is not fully answered, and, so far as appears, science is not complete. After all its elaborate and most valuable explanations have been brought to bear on these very simple examples of human action, only a partial answer is given, and what is wanting concerns the most important element in the action—that which determines one movement rather than another—that which originates the movement, and of which we speak as will-power. Science embraces only that, which is mechanical, and something more than the mechanical must be included if the facts are to be explained. Science must labor to complete itself. In order to do so, it must come upon the territory usually appropriated to mental philosophy. Science proclaims that it must include man in order to construct a true science of the universe. So it here appears it must. This is in-

evitable, and we welcome science upon the ground, where a large undertaking is before it. We seek to know how movement originates. It is of no small consequence to know that we have muscles to work, and nerves to control them, and stores of nerve-energy to discharge, and great part of the blood-supply flowing to the brain, and periodic repose for brain and muscle, while the process is kept on by which the blood-supply is pumped up to the storehouse of nerve-energy. But we want to know what is beyond all this. If the stores of nerve-energy are kept up, how does determination to a given direction of activity take place? How does it happen that a single limb is used at one time, both limbs at another time, and again both kept at rest?

Even if science tell us that it cannot bring the operations of the brain itself under direct observation, while molecular changes are going on, and movements of the limbs are taking place, it does not thereby escape the demand for going farther. Something has been done in connection with observation of cases of injury to the cranium by gunshot wounds, and also observation of the brains of the lower animals in cases where, by vivisection, a section has been made sufficient to expose the surface. Enough has by these means been accomplished to confirm the positions as to blood circulation, molecular changes, and management of the organs of locomotion. But nothing has been done by all this observation to meet the full scientific requirements, if we are to have a science of human action. All questions as to possible ulterior results in the line of scientific advance are premature. There is a block on the line of progress. The will-problem is the unsolved scientific problem. And when the full extent of the difficulties connected with this problem is made apparent, it will appear that the block on the scientific line is much more serious than has yet been recognized by scientific investigators. There is no great risk of undervaluing anatomical and physiological results, but whatever be the value of these we are still in want of additional science. The wonders of human organism are now much more fully known than ever before, and the discovery is an honor to science, as it is intellectually and morally a boon to the human race. But there are still more wonders beyond, and science has not come up with these.

We have only come upon the mere boundaries of the region, and science as yet shows no preparedness to enter on the territory.

I am not here affirming that scientific men have said nothing as to the facts beyond these boundaries, but that we have no science of things within this region. There are facts, and the facts are well known—so well known that the busy multitude are as familiar with them as they are with taking their meals or attending to business; but the science which seeks to embrace the universe has not advanced to include within its sweep these every-day facts. There are scientific men who use the word “scientific materialism,” and they say it includes within it all that belongs to human existence. But when we ask for the science it is not forthcoming. We have no book which records patient research for the completion of “scientific materialism” by giving a clear explanation of the main characteristics of human action, as we have records of delicate and most admirable observation as to the mechanism and functions of the nerve-system. When scientific men speak out strongly, and tell us that they are quite persuaded that the thing will be achieved, there is not any reason to object to such utterances, but what we want is the science itself. “You see I am not mincing matters, but avowing nakedly what many scientific thinkers more or less distinctly believe.” Such is the utterance of Tyndall as he comes up with the difficulties.<sup>1</sup> Now, I have already recognized a department of scientific belief, and admitted its value as tributary to progress; but when it is pointed to at such a juncture as this, and our attention is called to the circumstance that it is occupied by unverified hypotheses and the expectations which these awaken, we cannot greatly wonder at the discredit which science often throws on belief. We only marvel that scientific men confound such belief with a belief which rests on much more solid grounds. Still we do not at all object to hear what “scientific thinkers more or less distinctly believe,” but we are most anxious to have from them what they undertake to give—the science of the facts. This would save us from a great deal of needless utterance, both in the form of assertion and controversy concerning the asser-

<sup>1</sup> “Fragments of Science,” p. 119.

tion. Yet it is a science of facts the most familiar in human life which is altogether wanting. And no progress is being made by scientific men to supply the want. The situation, as I view it, is this. On the line of scientific progress the locomotive has come to a standstill; scientific men have got out of the train, and, standing together in a perplexing position, they are talking loudly about the greatness of the difficulty. "Our difficulty is not with the *quality* of the problem, but with its *complexity*."<sup>1</sup> This, as I understand it, means, Our difficulty is the greatness of the difficulty. And to this, without any scientific pretensions on my part, I can give a ready assent. But, whether we be scientific or philosophic in our standpoint and training, we are all agreed in this, that the question must be worked out on the scientific line, depending on observation and induction, or else it must be abandoned. And when it is admitted on all hands that there is a wide region of well-known facts to be explained, it is utterly unscientific even to suggest that it is to be abandoned as beyond the reach of a science of the universe. If "scientific materialism" must meanwhile stand aside for a space and abate its pretensions, there is no help for it. Let the work be done first and the honors gathered afterwards. Scientific thinkers more or less distinctly believing certain things must work out the demonstration of their belief; and they will find that the world is not slow to accept demonstration. And besides, in view of the avowed "complexity" of the problem, and the possible perplexity of the inquirers, the world may even be patient. This there is at least to give encouragement to those who undertake the task, that, whatever be the intricacies of the will-problem, there must be entire agreement in this, that we admit the existence of law in matters of will, and do not make allowance for the element of caprice; while, under this acknowledgement, we desire to be guided to a scientific knowledge such as the discovery of law would afford, and in such knowledge we should be content to rest. But one thing is certain, science cannot rest in a science of nerve and brain, and cannot be allowed to speak of all beyond that as an unscientific region. Where facts are, there laws must apply; and into the region of

<sup>1</sup> Tyndall, "Fragments of Science," p. 119.

applied law science must advance. Nor can it be any valid objection to scientific procedure if our survey show that there is a region between one set of facts and another set, which cannot be explored in detail and brought under subjection. If on the line of science there be discovered a district which offers insurmountable barriers, we must be content to pass beyond it, and to continue in more remote territory the line which it is meanwhile impossible to run entirely through. The difficulty of connecting the facts of nerve and brain action with those of thought and will action can afford no scientific warrant for declining the task of constructing a science of thought-action and will-action. If there are facts such as observation and inference, and also concentration of effort in connection with both ; and if these facts are recognized, and even signalized, in the structure of every physical science—it is simply impossible that science can decline the task of advancing to deal with these facts in like manner as it has dealt with other facts. This task has been attempted in the past by philosophic inquirers, and it appears from sundry utterances presented in strong terms that there are some scientific men who do not greatly value the labors of such men as Descartes, Reid, Stewart, Kant, Cousin, and Hamilton. These thinkers at least toiled resolutely at the task which has not yet been undertaken by scientific men, and those who disparage their work do not show special acquaintance with the problems which engaged the attention of departed philosophers. But we have before us a new historical era, where psychologists and physiologists shall push their lines to the nearest points of approach, and make it a special interest to pass and repass from their own to their neighbors' territory. The regions are extensive, and though they lie well apart, the benefits of travelling have become proverbial in our times.

While, however, there has been no science, there has been abundance of utterance by scientific men. Some such utterances we have had which may prove hampering. And yet if this be so, it will only illustrate how little there has been of science in this direction, and how great is the need for it. Thus it has been said, " When we ponder, it is the brain that thinks." But where is the evidence ? Under what course of observation has this been recognized ? That there is brain, and that there is an exercise which

we name thinking, are two facts well known. But that thinking is an exercise of the brain, is what is not in the same way known ; and here, as very often in scientific inquiry, the first great requisite is clearly to ascertain the facts. Again, advancing from thought to action, there is brain, and there is muscular movement. We know that these two are connected, and that the lines of connection can be traced, and we know that without discharge of nerve-energy from the nerve-centre there is no movement of the muscles ; we do not know how the outflow of nerve-energy is determined, or what is the efficient relation between the silent, invisible purpose and the visible movement. But we do know that the purpose precedes the movement—that the purpose has its single aim in the accomplishment of the action ; while we are without knowledge of the manner in which a volition becomes efficient in the sphere of muscular activity. This, however, is beyond all doubt or question, that there is connected with human activity what has been called “dual truth.” For it cannot be charged against science that it supports such an absolutely ridiculous position as doubt concerning the reality of what are called mental phenomena. A duality is admitted, even though it be recognized that one side is beyond the region which science has embraced. “Associated with the wonderful mechanism of the animal body we have phenomena no less certain than those of physics, but between which and the mechanism we discern no necessary connection.”<sup>1</sup> These phenomena, equally certain with those of physics, require equally to be embraced if a science of the universe is to be attempted.

A clear and full recognition of the facts to be explained is the first requisite for scientific procedure. And it appears to me that it is a pressing duty for those who look at the whole subject from the philosophic standpoint to set forth as definitely as possible the nature of the problem. If this can be done in such a way as to meet exactly the present stage of scientific inquiry, and in the spirit of those who recognize the unity of truth, and welcome co-operation for the discovery of what is still to be made out, we may look for important results. A return upon the two simple forms of bodily movement already referred to

<sup>1</sup> “Fragments of Science,” p. 119.

will afford guidance in the attempt. From the scientific side it has been clearly ascertained what is the mechanism which provides for movement of the limbs, and what is the force which operates upon this mechanism, so as to produce motion at any instant, or to continue movement of the muscles for a lengthened period. Now beyond this region in which science has been at work, in which most important results have been reached, and where many important discoveries still require to be made, there is another region quite familiar to human agents, where is another class of facts all needing to be explained. How the two are related to each other it may be impossible to show; but that they are not only intimately but essentially related, it is quite easy to prove by experiment at any moment. To illustrate voluntary movement constitutes no part of our perplexity. Further, to admit that there is reflex motion under external influence, and also spontaneous action within the organism, involves us in no confusion as we point to a distinct number of movements which we denominate voluntary movements. The will problem is a distinct problem most intimately connected with a science of human life. The man who reads a book continues the exercise by a determination of his own, and the mechanism of the organ of vision, taken along with the functions of the nerve-centre, give us only one side of the dual truth. On the other side, we have personal interest, mental bias, prior training, and present concentration. Into some of these matters science has attempted to penetrate, in making account of the influence of environment, the power of association, and a law of heredity. But besides all these, keeping as they do largely to the externals of the problem, there remains the fact of voluntary determination illustrated in the act of reading, and acquired power of concentration in the history of an individual, by means of which he is able to work his way through intricate courses of argumentation which would otherwise be abandoned. This exercise of will is again simply illustrated by the exercise of walking across the room for a definite purpose. And the use of will in such a case is not in any way obscured, it is rather more clearly brought out, by pointing to such a movement as the apparently purposeless movement in swaying the limb while engaged reading. Taking the last first, we are nearest the

region of science proper. To an external observer, it is plain that the swaying of the limb is a personal act as truly as the reading of the book ; and yet that it is not a personal act in precisely the same sense, or, as we might otherwise say, it is not so much of a personal act as the exercise of reading. If from the position of the observer we go over to the position of the reader himself, this view is confirmed. He is not fully aware that he is moving his pendent limb as he is doing, and yet he is not altogether unconscious of it. The movement is so far involved in personal exercise, that if even a very gentle external restraint were placed upon it by any one near, that restraint would have a perceptible effect upon the main occupation of the time. The movement itself, contemplated as an external fact, gives clear evidence of an essential connection with the intellectual exercise in which the agent is engaged. The varying degrees of energy and velocity in the movement, connected as they are with those varying forms of expression on the countenance which Darwin has studied with so much advantage, give some external index to the degree of internal guidance which is being directed upon the seemingly purposeless movement. When the attention is being more absorbed by what is being read, and the marks of interest on the face are deepened, the movement of the foot becomes slower, or is almost stopped. When the attention is again liberated to some extent, by abatement of interest, the motion goes on again more briskly. If we ask the reader, we shall find that he has not been fully aware of the muscular exercise which had been kept up ; and yet, if you ask him to recall the positions in the book which have most interested him, it is easy to identify a succession of periods of quickened interest, harmonized with the periods of slackened movement externally observed. In this way it is made out even as to an apparently purposeless motion, that there is an exercise of personal control, which is not recognized in merely reflex action, or in an example of spontaneous action within the organism, such as we notice in the continual movement of hands and arms by infants still too young to show any signs of external observation. Now, science has done something towards explaining the possibility of such muscular movement, with comparatively slight consciousness—it may be even actual unconsciousness—of direction of the ex-

ercise on the part of the agent. I do not enter upon the wide subject of unconscious cerebration. It is enough for the present purpose that it be noted that study of the laws of nerve-action has shown that facility of control over the nerve-lines is secured as the result of usage, and that direction of a current of influence upon a series of muscles may suffice to secure thereafter a continued stream of nerve-energy in the same direction. Or, as the law has been stated, "the conducting power of the nervous fibres increases with the frequency of their excitement."<sup>1</sup> If a line of communication become strengthened by frequent usage, the conducting power increases, and it proves a much simpler thing to keep up movement without effort. This accounts for physical habits involving constant action, while the agent is almost entirely occupied with a distinct exercise. But it needs to be observed that science, in bringing us thus far on the way, is showing us how will-power may be in some movements abated in its exercise, or even dispensed with. It is not helping us to solve the will-problem. And, what is perhaps more striking still, it is showing us organism brought into a certain kind of self-regulation, not only in connection with a large degree of concentration on some higher exercise, but even in a way contributing to higher concentration by liberating physical movement from continued regulation of the agent. Science thus far relieves us from a degree of complexity belonging to human action, but only in such a manner as to give increasing vividness to the true nature of the will-problem, which remains almost untouched by this scientific conclusion.

If from this case we pass to that of walking across the room in search of a book, science still attends us with its aid, for there is no physical movement more frequently repeated by us than that of walking. Accordingly, under the law of nerve-action just stated, walking comes to be one of the movements performed with least expenditure of effort in self-regulation. But here again it is made conspicuous, that what we need to account for is that which the scientific position does not include. We must explain how it happens that at the particular instant noted the seemingly purposeless movement of one limb is

<sup>1</sup> Müller's "Elements of Physiology," ii. p. 939.

abruptly stopped, and both limbs are set in motion for a definite end. You cannot explain this without reference to muscles and nerves, and the laws which determine their action ; but it is not fully explained thus. Science does not come up with all the facts, and it is the will-problem which has once more brought it to a standstill. Granting that there are muscles, and nerves, and stores of nerve-energy, our question is, What set them all in motion at the instant ? It was a thought suggested in the volume read which awakened the wish to verify it, and led to the volition to obtain the means of verification. And science tells us nothing of the will-power which sets the nerve-energy in motion for the attainment of a definite end—which end, it must be observed, is not a physical end which can be gained by muscular action alone, but a mental end, or end contemplated by the agent who has set the mechanism to work. There is—quite naturally, I admit—a tendency among scientific men to attempt to bring the whole exercises of thought and will under play of the laws which regulate nerve-action ; but in sight of even this simple example, the futility of the attempt is manifest. The duality of truth must be granted. There are facts which nerve-action does not explain, and these belong to a region from which nerve-action itself is governed ; therefore the science of the facts must outstretch the science of the nerve system.

And now we are on the threshold of a vast region within which science is a comparative stranger, where references to nerve-currents become fewer and feebler, and traces of the influence of heredity have as yet made only uncertain outlines of footpaths. It is into this region we specially need to have science advance. We need to consider the will-power which governs the limbs, and finds in such government only a small part of its dominion. With such an example before us as that afforded by attentive reading, we seek to ascertain what science can say as to the acquiring of habits of attention. Are such habits the product of external influence brought to bear upon the individual, or the result of determination within the individual himself ? We wish to ascertain all that can be gathered and systematized as to the influence of environment, and specially of education. An exact science, marking with precision the

limits of the influence of these two, will contribute in a very important way to the common result sought by all lovers of truth. But such a science will be attained only by advancing beyond the lines of physiological research. We must know more of human nature, and more of the full range of human action, than physiology affords. Again, we have spoken of anger as characteristic of all the higher forms of organized life, and we observe certain ends served in the economy of things by this powerful impulse; but we find that the restraint of angry passion and the complete subjection of the impulse is aimed at by men. And here our questions start again in great number. What is the rational ground on which men aim at the establishment of self-government in this respect? Is there some clear law of human life which requires this, and which somehow does not apply to lower orders? If there be a fixed law in organic life which gives rise to irritation, is there somewhere deeper in human nature a law which requires a man to keep his irritation under control? And if there be, as men seem to agree that there is, how is the control first attempted, and how is it gradually established in some cases, while it is not established in other cases? What do all these involve as to exercise of will? I might go on greatly beyond these questions, but space forbids. And I must ask my readers to observe that these are obvious and inevitable questions concerning the most ordinary and familiar affairs of every-day life. The science which does not touch them has a great part of its work to do, before it can profess to be a science of the universe. In view of all that "scientific materialism" has yet told us, it is very far from being a universal science. What the science of our times needs above all else is a fuller survey of the facts connected with human nature and the laws of its activity.

I have exhausted the space at my command in directing attention to the relations of science to the problem of will, and I must reserve for a subsequent article the relations of philosophy to the same great problem.

HENRY CALDERWOOD.

## ART AS AN INTERPRETER OF HISTORY.

IT has been truly said that art, in its protean forms, is the historiographer of the world. It is equally true that its rich and manifold record is only beginning to be intelligently studied in our own period. To enunciate the problem more clearly, our theory is that art, taken even by itself—and of course more powerfully when combined with other inquiries—is an interpreter of the character, conditions, and social, religious, and political sentiments of the people among whom, and the periods in which, its great works have been presented. Thus Egyptian art is full of Egyptian history ; Grecian art teaches the history of Greece and the Greeks ; in a word, all art is a record of individual, social, and national life. There is a truthful story in the ruins of the sun-temple at Baalbec—

“ Whose lovely columns stand sublime,  
Flinging their shadows from on high,  
Like dials, which the wizard Time  
Had reared to count his ages by.”

Or, to take the most familiar and striking illustration : what a series of commingling histories clusters around the temples that have crowned the holy mount at Jerusalem ! First, the hope of David and the fruition of Solomon, a thousand years before Christ ; the materials and the workmen brought from distant countries ; the liberal payment of wheat and barley to Hiram, King of Tyre ; the Phœnician navigation of the Midland Sea. Then, five hundred years later, the terrible destruction by Nebuchadnezzar ; then the return of the ransomed, by permission of Cyrus, with songs and joy, to rebuild it. The second temple is replete with history, in the great *lacuna* between the last of the prophets and the appearance of Herod the Great, which we can only fill by the record of Josephus and

the Apocryphal books. How the interest increases with the story of Herod, his rebuilding of the former structure, and the appearance in its courts of Him who came at once to destroy and to fulfil! Last of all came the terrible siege, after which not one stone was left upon another, save the deep foundation-wall, where the Jews yet weep unavailing tears, in mourning for the past, and with but vague hope of the future.

The history of the temple on Mount Moriah is the history of the Jews and the partial history of the many peoples who had to do with their checkered fortunes. And now upon its site stands another stone record, in the famous *Camcat el Sakhra*, that famous mosque of Omar, which eclipses the sanctity of the temples of Mecca and Medina, the first strongholds of Islam.

This by way of general illustration. To treat the subject justly and adequately would require, in combination, the talent and training of an artist and the pen of a historian. For, if the writer be an artist only, he will be concerned about the technicalities of art and neglect the history; and if he be a historian alone, he will certainly be in danger of neglecting those art details from which he should gather his philosophy. It has been unfortunate that these two characters have been rarely conjoined, and that, consequently, the historic relations and teachings of art form an almost entirely new topic in the school of modern history. Thus fairly acknowledging the difficulty, and with no claim to be an artist, but only a student of History, I propose to offer some facts and some suggestions bearing upon the discussion of this most interesting problem. That it is of very general and increasing interest is manifest from the numerous books on art which have been recently issued, the great numbers of our people who study art in foreign galleries, and the pleasure with which art-lectures are beginning to be greeted all over the land.

It is significant to observe that the modern word *aesthetics* was first applied to the realm of beauty and taste by the German Alexander Baumgarten, no longer ago than the middle of the eighteenth century, and it can hardly be said to have taken its place even now in the curriculum of general education in America. It is still considered a speculative and unestablished science in the domain of psychology.

Derived from the Greek verb *Aἰσθανούαι*, to perceive, it

considers the perceptive faculty as engaged in the discovery and analysis of *beauty*. The entire field of man's inquiry is mapped out into three portions, occupied by the three comprehensive ideas—the good, the true, and the beautiful. The science which establishes truth is logic; that of which the province is the good is ethics. The beautiful falls to the share of æsthetics, which in the scheme of psychology is thus co-ordinate with logic and ethics.

All three are necessary to the study of art in its historic relations; but before we can enter upon these relations, art must be studied in and by itself, and here we are in the uninvaded realm of æsthetics.

The announcement of this new science has caused a change in the classification of the arts and sciences; for æsthetics is concerned about beauty wherever it is found, and thus lays its hand upon every art of which beauty is an element. It takes cognizance of poetry, music, painting, architecture, sculpture, and all forms and varieties of decorative art. Wherever a glimpse of beauty is seen, æsthetic science eagerly pursues it, and subjects it to scrutiny, inductively seeking to understand its essence, determine its laws, and account for its wonderful influence.

But the special subject of this paper is confined within narrower limits: it comprises the fine arts, in the ordinary acceptation of the term, architecture, sculpture, and painting; and even this range is too extensive for our present space; we must limit ourselves to the consideration of the first two.

Architecture, as a practical art, combines utility, of a material kind, with beauty. Sculpture, designed primarily to please and elevate by preserving the worship of the gods and the memories of men, depends upon a partial imitation, of which the essence is *form*. Painting is more or less an illusion, obtained by adding *color* and *shade* to form.

Each makes its historic record distinct from the others, but architecture and sculpture have joined their stories with wonderful effect; while painting has often added its graces to their union, as in the wonderful frescoes of the Renaissance at Rome.

I. First, of architecture in history. We shall find this art in the beginning arising from the simplest needs of men. The ear-

liest inhabitants of the earth dwelt either in the woods or in caves for shelter; their rudest types were the troglodyte or the forest savage. The next step was to the tent of the simplest shepherd, or the rude hut of logs and boughs. At such a time there would be no thought of ornament, but only of the barest comfort.

Then, with the inherent belief in a Divinity and the vague hope of an after-life, came the idea of tombs, like the topes and dagobas of India, the cromlechs and barrows of Druidism, and the mounds of the American aborigines; and also the grander idea of a temple, which should be a fitting shrine for the Universal Deity. Thus, while the tent or the hut was still good enough for humanity, a developing religious taste demanded beautiful and costly edifices in which to adore the majesty, propitiate the anger, and sue for the mercy of that Almighty Being whom the intuition of man loudly declared. Such was the seed-thought from which grew alike the rock-cut caves of Egypt and Bombay, the pagodas of the East, the columnar temples of Athens, and the magnificent Christian cathedrals which now awe and delight the world.

But by rapid process, as men congregated together, and, by their very association, began to develop the earliest civilization, other public buildings became necessary. With the origin of trade for the subsistence of this associated life came market-places, which from the rude square, the resort of gathering hucksters, were transformed into the *agora* of the Greeks and the *forum* of the Romans, with quarters for hucksters, bazaars for shop-keepers, and offices for money-changers. Luxury soon fashioned balconies for spectators, and galleries and porticoes for the rich and idle, where they might saunter, and, as in the Athens of apostolic days, spend "their time in nothing else but either to tell or hear some new thing."

Take one step farther, and we find, as the next demand of this nascent civilization, the idea of instruction, expanding into schemes of education and systems of life-philosophy. Around the *agora* were the porches, where the great masters of knowledge gathered their pupils and taught them. For so grand an instructor as Plato there was the Academy; for Aristotle, the Lyceum; for the schools of Alexandria, the Museum. Libraries were formed, inadequate buildings, to hold the written treas-

ures of the age and of all former ages. Thus architecture advanced with every need of human life and every form of human thought.

Public amusement soon began to make its demands upon the new art, and hypæthral theatres were erected on a colossal scale, where instruction in morals and religion was combined with entertainment for the masses; where the tragedian and chorus thundered, in mask and cork-soled buskin; and the comic actor, in sock, shot folly as it flew, and satirized, not without caricature, the vices of the day.

“ Considered in the light of a historical record,”<sup>1</sup> says Fergusson, “ architecture acquires not only the dignity of a science, but the especial interest of being one of those sciences which are closely connected with man’s interests and feelings, and the one which more distinctly expresses, and more clearly records, what man felt and did, in previous ages, than any other study we are acquainted with.”

Of ancient art indeed almost the only remains are those of architecture and sculpture. Of the painting of the classic ages there is little left but tradition and the praises of contemporary writers. But the architectural works still exist. Grand colossal constructions present to us a rare consecutive history in stone and mortar.

II. Lying on both banks of the Nile may still be seen the temples, including Luxor and Karnak, Medinet Aboo, and the ruins of that edifice at the entrance of which sit Memnon and his brother in twin grandeur, one of whom still strives inarticulately to tell to the rising sun the story of that age,—

“ When the Memnonium was in all its glory,  
And Time had not begun to overthrow  
Those temples, palaces, and piles stupendous,  
Of which the very ruins are tremendous.”

These were at once temples and palaces; before them stood massive walls with the pylon, or gateway, approached sometimes by a double row of sphinxes or ram-headed colossi. In front of some of them were graceful obelisks of polished red granite, rising from seventy to ninety feet in height,

<sup>1</sup> “ History of Modern Architecture,” 528.

covered with hieroglyphs,<sup>1</sup> or huge statues of men like the Memnon.

Last of Egyptian structures, and more imposing and interesting than all the rest, is the pyramid. Both the proposed derivations of the name suggest something of its grandeur.<sup>2</sup> The first design of the pyramid was probably as the colossal tomb of monarchs. The largest and oldest, that of Cheops, was built about four thousand years ago; it covers thirteen acres, and is nearly five hundred feet high. It is a curious index of the extent of this structure, mentioned in the "Egyptian Institute," that a stone flung from its top, with the greatest force and with a sling, cannot reach its base.

It is not my purpose to enter into the details of these structures, but only to suggest the lessons in historic philosophy which they present. It is fortunate for the student that he is not left to work out the history from the bare forms and materials of these erections. Their story is to some extent written upon their polished faces. Obelisks and portals and interior walls are covered with hieroglyphs, sacred inscriptions, which need only to be deciphered that we may read what it all means. Thus while the art partially interprets the history, these writings interpret both history and art.

A partial solution of this problem, almost insoluble as it first appeared, we owe to scholars, whose investigations are as modern as this century. Much remains to be done, but by the labors of the Champollions a key was discovered, modified by later scholars, and the ideographic signs have been mastered in goodly number. The hieratic and demotic writings begin to be understood. The mummies give up their cerements, upon which brief histories of their lives and deaths are written. Thus, we read again the record of Moses, on stone and cloth and papyrus, more than three thousand years after he wrote it in the Pentateuch.

<sup>1</sup> It is significant at once of the condition of Egypt, and of the energy of modern art culture in Europe, that, from the days of the Roman Augustus down to the present century, forty-three of these obelisks have been brought to Europe, and that, including the famed Cleopatra's Needle, *only seven remain in Egypt*. The Egyptian obelisk in its finest form and proportions may be studied in the *Place de la Concorde* at Paris, or in the spacious piazza of St. Peter's at Rome.

<sup>2</sup> One form the Greek *πῦρ*—fire—would express its rising like a pointed flame to the heavens. The other is *Pa-rama*, the mountain.

And what are the manifest historical lessons? This Egyptian art covers with its stone cerements the mysteries of a gloomy esoteric faith; like the skeletons at their feasts, it is intended to inspire awe and humility. "Every thing," says Volney, in speaking of Egyptian ruins, "inspires the heart and soul with astonishment, terror, humiliation, admiration, and respect."

Take the entrance by the modern tourist into one of the pyramids, as illustrative of its silent teaching: the long, low passage; the back, painfully bent; the stifling air and the heat; the gloom which surrounds and settles upon the soul as the traveller passes through the queen's chamber and enters that of the king, with its walls of polished granite; the unearthly echoes, ten times repeated, of a loud shout or a pistol-shot. Then comes the increasing anxiety to return; the painful journey back; the quick gasps for breath as the open air is again reached, and a sense of exhaustion, which cannot immediately be shaken off.

To Bossuet the pyramid was only a tomb, and spoke of annihilation; to the more imaginative Chateaubriand it was instinct with immortality. The tourist shares both these opinions—on entering and returning.

To the calm and philosophic observer these Egyptian structures reveal their history. They set forth the system of religious belief and worship. They tell him of Egyptian royalty, despotic and grinding, deriving itself from the gods, dwelling apart with them on earth, and demanding massive tombs more defiant of time than the Tower of Babel, remaining intact to-day, although they were built before Romulus and Remus were suckled by the she-wolf.

They magnify the augustness of death in their mighty pyramids, their massive sarcophagi, their imperishable mummies, whose ghastly features were once enlivened with a soul, and looked upon the world "when it was fresh and young and the great deluge still had left it green."

And again, Egyptian architecture speaks to us of a period of great skill and mechanical device in the quarrying and handling of the immense blocks of stone of which their principal structures were built, and of high mathematical attainments in the calculations of proportions and sustaining strength.

The careful study of these works discloses the periods and circumstances of their erection. Upon this I cannot dwell, but I observe that we may thus pass, with tolerable certainty, from the earlier time to the barren period of the shepherd kings, from 2000 to 1400 B.C. We may then observe somewhat of the influence of Asiatic luxuriance; the effect of Grecian lightness and beauty of form—a noble return for what Greece had owed to the earlier Egyptian art—and, in still later days, the influence of far-reaching Rome. Rawlinson speaks of the account given by Herodotus as “in a peculiar sense monumental history; that is, it was such a history as would be naturally obtained by a traveller who inquired principally concerning the founders of the great public edifices which came under his notice.”<sup>1</sup>

Among the subordinate sciences of modern classification, that of Egyptology has ranked, and now ranks, among its votaries some of the most eminent scholars of this century, and the great science of history, *scientia scientiarum*, as Bacon has justly styled it, is always eager to utilize their valuable researches. I have said that these investigations are modern; but considering the difficulties encountered, the progress has been exceedingly rapid. It will be remembered that, with the expedition of Napoleon Bonaparte to Egypt in 1798, a number of savants were sent out by the Directorial Government to study the archæology of the country. The campaign was short, and the French tenure very precarious; and yet, amid the doubts and ridicule of the army, they laid the foundations of the new science. They were obliged to carry their instruments, papers, and specimens upon the backs of asses, and in the train of an army which was most of the time but a moving column. The discomfort of their situation is pithily told in the story that when, harassed by Mamelukes, the French regiments were obliged to throw themselves into squares against cavalry, the cry of the old soldiers was, “Savants and asses, to the centre—march !”

It was some years after, between 1809 and 1820, that the inquiries of these gentlemen, aided by further researches, were published in nine huge folio volumes, with fourteen volumes

<sup>1</sup> “*Ancient History*,” 75.

of plates, entitled "Description de l'Egypte, ou Recueil des Observations et des Recherches, qui ont été faites en Egypte pendant l'Expédition de l'Armée Française."

Such was the real beginning of Egyptology. The work was in some measure superseded by several treatises of Sir J. Gardiner Wilkinson, which treat of the history of the Egyptians as "derived from a comparison of the paintings, sculptures, and ornaments still existing with the accounts of ancient authors."<sup>1</sup>

But even since these were written more popular and explanatory works have been written in great number, and many of the *daha beeyahs*, in every season, carry intelligent travellers, who come back to furnish a new and valuable quota to the art history of Egypt; while photography lends its magic power to bring the distant near, and to build again the rock-ribbed temples in our libraries and drawing-rooms, with an illustration which we can never fail to greet with surprise.

For long centuries Egypt has been torpid, a dead-alive, a tributary province, among the nations; but the same beneficent Nile is there; the Egyptian type of man is as good as ever it was, however oppressed it has been for ages by a false creed, a Turkish despotism, and effeminate social customs.<sup>2</sup> He is surrounded by the colossal works of his country's power and grandeur; and the last and best historic lesson of Egyptian art is one of reviving hope. The more enlightened rule of the present Khedive, a viceroy only in name, a monarch in reality, makes this hope stronger and more satisfying as the years roll on. The rival ambition of England and Russia may complicate the problem; but if Egypt be not engulfed in the portentous convulsions now threatening the empire of her titular master, she will rise, in better hands, from the sleep of ages to a brighter life and happier fortunes. "The secret of the sphinx" is indeed "the whole uninterpreted and undiscovered part of Egyptian history," and we may hope that its

<sup>1</sup> There are nine works on Egypt by Wilkinson, touching every subject of interest connected with the history of the country.

<sup>2</sup> Mrs. Amelia B. Edwards, in her "Thousand Miles up the Nile," speaks of the *fellahs*, or laborers, as but little changed in 6000 years, and as using the same agricultural and household implements; while the modern *dahabeeyah* is very like the galley sculptured on the tombs of the kings.

complete disclosure to the world will be in a brighter and better future for Egypt.

III. From the sombre atmosphere of Egypt we pass at one step to the light, grace, and joyousness of Grecian art, which owed, as we shall see, its origin to Egypt and to that vague Nabatean civilization whose record is being exhumed in brick and stone, covered with cuneiform inscriptions. Such, however, were the local conditions of Grecian art that the transformation was very striking.

The Egyptian architecture was massive and in its chief structures low and many-roomed, even to labyrinthine intricacy. The roofs of temples were flat, and required very thick and close walls to support them. The structure was a cluster of brick and stone, connected by narrow passages, and extended, as in the temple of Luxor, over a quarter of a mile square, or, as in that of Karnak, over a half a mile square. These buildings inclosed deep mysteries, which they would keep from the light of day or disclose only to the initiated.

How different the Grecian idea! For their temples the Greeks sought a sun-bright eminence like the Acropolis at Athens or at Corinth. On this they erected fanes surrounded with columns, usually hypæthral, or open at the roof, with a simple but imposing façade, a low gable resting upon a row of pillars, and presenting above the entablature that long-based triangle called the pediment, which was enriched with statues and sculptured ornaments descriptive or symbolical of the gods and heroes of their brilliant mythology of nature.

It is interesting to study their columnar progress from the simple Doric, through the Ionic to the Corinthian. These form the alphabet of Grecian architecture, and each step is full of history. If the earlier temples were astylar, the column soon came to give beauty and symbol. We may accept or discard—it is not easy to do either rigorously—the symbolical origin of the pillars. According to some writers, they indicate human support—they are unformed caryatides. With the Doric was associated the idea of a man: the column was six times as high as the diameter of the base, following the relation between the foot and the height of a man. According to Vitruvius, the Ionic adopted the idea of the female figure, and made volutes in the capital, in rude imitation of a woman's

hair. And the story is well known, whether it be received or not as true, how a basket covered with a tile, and placed on the grave of a lovely maiden, was grown around by the tendrils of an acanthus, and how the architect imitated it in the Corinthian capital.

I give these stories, because they are at least suggestive of the entire independence of the first artists. They were untrammelled ; guided by nature, they followed their own tastes and fancies. There were no schools ; there was no established style or order. The individual artist worked for beauty and utility out of his own brain, and thus made his school and style, for later imitation and modification. And he was not a designer only, but a genuine builder, who saw and felt the necessity, and was endowed with the inspiration to meet it. There is nothing more manifest than the spontaneousness of the sculpture in the decorations of capital, frieze, and pediment. One need the earlier architects felt, and sometimes anticipated ; it was the appreciation and acceptance of cultured beholders. Art in Greece attained its highest point of excellence when the Athenian people were ready to admire it with an intelligent admiration.

The climax of effect was reached in Athens when the Doric temple of Phidias was perched upon the Acropolis. I suppose no description does justice to the Parthenon and its circumjacent structures : history must be summoned to our aid if we would duly appreciate them ; and when we remember that Pericles, who has given his name to a halcyon age in the world's history, ordered the erection of the building as we now restore it in fancy ; that the immortal Phidias directed the work and designed the ornaments ; that Callicrates and Ictinus built it of white marble, we obtain a glimpse of the reciprocal bearings of history and art—the glories of the age of Pericles, the creative genius of Phidias, the consummate skill of the master-builders, the splendid capabilities of Pentelican marble, and the ready intelligence of the Athenian people.

The Parthenon was in full view from the Areopagus, or hill of Mars, where the wise men of Athens held their sessions : the famous speeches of world-renowned orators, pronounced from the Pnyx, re-echoed among its columns ; it is replete with the history of pagan Greece, and yet we chiefly like to

think of it in another historic connection. It is when the great apostle to the gentiles stood on Mars' Hill, and his splendid eloquence thundered through its peristyle, and was illustrated by the features and ornaments of the temple itself.

Turning to his right as he spoke, he pointed to the Parthenon when he told them that God, who made the world and all that it contained, "dwelt not in temples made with hands."

He had in view the beautiful columns of the peristyle, the exuberant sculptures of the tympanum, and the colossal figure of Pallas Athena, in ivory and gold, the work of Phidias, rising more than forty feet from the floor, with the surrounding statues of deities and demi-gods, when he said, "Forasmuch as we are the offspring of God, we ought not to think (as you in your blind devotion do) that the Godhead is like unto gold, or silver, or stone, graven by art and man's device." The conclusion was not flattering, but startling, that if God had winked at the times of ignorance—considered by his audience as the period of greatest light and glory—during which that temple was built, and an altar erected to the unknown God, he now, by the voice of his humble, persecuted apostle, called on men everywhere to repent. Such is the Christian lesson drawn from the Parthenon.

It is an arbitrary but convenient arrangement for the student of art and history to divide the history of Grecian architecture into three periods: 1. From 600 to 470 B.C.—from Solon to the Persian war; of which the best illustration is found in the group at Pæstum. 2. From 470 to 338 B.C.—from the Persian war to Philip of Macedon. In this period we have the temple of Theseus at Athens; the temple of Nike at the entrance to the Acropolis; the Parthenon itself (440). 3. The later period is one of decline in architecture, in which statuary principally occupied the artist, and great cities were laid out to mark the conquests of Alexander and the ambition of his successors.

One word more. We find an epitome of Grecian architecture and of Grecian history in the Parthenon and its surrounding structures. It was columnar, it was low, it was massive and yet graceful, it was open, it was full of chaste decoration. Founded on correct principles, which have challenged the criticism of succeeding ages, and planned with great mathematical

exactitude, it combined beauty, fitness, and strength ; and the Grecian type, notwithstanding the decline of Grecian power and the rise of other systems, is still accepted as a model for modern structures in all parts of the world.<sup>1</sup>

It does not need the reconstructive finger of a Cuvier or an Agassiz in art to restore on paper the wonders of the Acropolis, as they clustered there in uninjured completeness in the days of Pericles and long after.

Thus restored, it is almost a synopsis of the Grecian annals. The western view would present, on the left, at the foot, those Pelasgian walls which take us far beyond the domain of authentic history, to an ante-Hellenic period which is full of fable and conjecture. In the precipitous side is the cave of Pan, above which is the temple of Poseidon Erechtheus. Upon the steep front are the Propylæa and the Temple of Victory, which mark the pride of Grecian conquests; and crowning the whole is the Parthenon itself, a model of original beauty, with its eight columns in front telling forth to all ages the glories of the best goddess, the protectrix of Athens, the goddess of purity and wisdom, who had sprung from the brain of Zeus, sheathed in invincible and immortal armor.

But while the Greeks thus erected and beautified the temples of their gods and their public edifices, they as yet gave little thought to their own homes. These were frugal in the extreme, and this frugality marks an important point in their history. Trench has attempted to draw some human philosophy from the *forms of salutation* used by different nations, as indicating their predominant characteristics. Those of Christian nations set forth prominently the power of God : • *adieu, good-by, etc.* With the Romans it was *salvete*, or simply the wish of health and safety. With the Hebrews it was *salem-eirene*—peace. But the livelier Greeks called on their brethren to rejoice, and wished them joy : *χαῖρε* was their salute. The comparison is just. The best wish of the Hebrew prophet was, “ Peace be within the walls ; ” “ Pray for the peace of Jerusalem ” was his cry. To a quiet, contemplative

<sup>1</sup> It was doubtless a republican and an anti-Christian taste that caused the erection on this model of the Church of the Madeleine in Paris. It may not be our ideal of a Christian temple, but it is certainly a grand and imposing building even among the varied and splendid structures of the French capital.

people like the Hebrews there was nothing better than rest and peace.

Not so with the Greek ; he was a busy, frolicsome being. His delight was in public games, where he could strive for the mastery in verse or with muscle, in the sight and hearing of a shouting multitude. The Athenians ran together to open theatres ; they congregated in temples full of daylight ; they rushed to Mars' Hill to hear what any babbler would say. Their worship sprang from the light and beauty and wonders of nature ; and—to reach our conclusion at last—in their art they displayed these same characteristics and sentiments. They had owed much, as I have said, in the origin of their art to Egypt, but they had adapted and transformed what they had received to their own character and conditions.

IV. I have thus far spoken only of their architecture ; if we now give a brief consideration to their sculpture or statuary, we shall find it to corroborate these views. In the profound study of this subject, it would be necessary to go back to a legendary Dædalus, twelve hundred years before Christ. I say legendary, although it is claimed that at the beginning of the Roman Empire several of his works were still existing, and some modern bronzes of Hercules are considered to be copies of his statues ; but I must be content with later illustrations, more easily identified and more strikingly historical in their bearings. The identity of Phidias, who died as late as 444 B.C., shines out in works that are still studied by the enthusiastic artist. We have besides the most detailed descriptions of his Olympian Zeus and his Pallas-Athena, and it may be reasonably believed that the *alto-relievo* work in the metopes, and the figures in the tympanum—brought to London, and known as the Elgin marbles—are his own handiwork.

And what a history do even these fragments contain : Minerva and Neptune contesting the possession of Attica ; the battle of the Centaurs and Lapithæ ; the great Pan-Athenaic procession ; and the imbruted torpor of an Ottoman sultan, who would let these grand works go piecemeal to a distant island, which had no nationality when these great works were achieved !

The statuary of the best period was of an intense materialism—Apollo, Venus, and the colossal Bacchus. The Venus

de Medici is a copy by Scopas from Praxiteles, and the Apollo Belvidere is a relic of Grecian art at the close of the Phidian period. From that time technical excellence increased, while the moral tone degenerated. In the words of Professor Day, "This stage of art, in the place of such subjects as Jupiter, Juno, and Minerva, in which the preceding period delighted, selected in preference Venus and Bacchus and Amor."

There is another group of statuary curiously illustrative of the legendary history, and marking a distinct period in Grecian art. About the year 1506, there was found in the Sette Sale, on the side of the Esquiline at Rome, perhaps the most unique and striking work produced in ancient times. Copies and casts and photographs have made it familiar to the whole world, few of whom think of its historic relations; I mean the unrivalled *Laocoön*. It seems significant that the downward step from the high gods to their loves and lusts should be followed by such a striking illustration of heavenly retribution.<sup>1</sup> It is said to be the work of Agesander of Rhodes, aided by his son and his pupil, and is worthy of Pliny's eulogy that it was "superior to all other works of painting or sculpture." Our ignorance as to the period in which the artist lived makes it doubtful whether the group was in existence before Virgil gave us his powerful version of the story in the *Aeneid*; but the verses and the statuary agree, and are reciprocal:

" Ille simul manibus tendit divellere nodos,  
Perfusus sanie vittas atroque veneno,  
Clamores simul horrendos ad sidera tollit."

*AEn.* ii. 220.

Not only does the statuary show us the straining of the agonized father, but we fancy we can hear the roaring cries which ascend to the stars. The value of this group to art history is displayed in a most interesting manner, by the use made of it, as the title and text of his masterly treatise on *Æsthetics*, by the German philosopher and poet, Lessing.

One other Grecian statue remains to be mentioned of historic interest, although little of its exact history is known. It is that of which Thackeray speaks so enthusiastically, through

<sup>1</sup> The same thought strikes one in contemplating the Niobe in the Uffizi at Florence—the Lydian mother petrified with grief at the loss of her children.

the lips of one of his heroes. "I had not been ten minutes in the place" (the Louvre), he says, "before I fell in love with the most beautiful creature the world has ever seen;" "this divine creature has lost an arm, which has been cut off at the shoulder, but she looks none the less lovely for the accident. She may be some two-and-thirty years old, but she was born about two thousand years ago. Her name is the Venus of Milo."

Nothing, I think, brings us nearer to the Grecian worship of Venus, to the enslaving love of all-conquering woman, to the materialism of their popular worship, and the sensuous in their nature, than the armless Venus of the Louvre.

All that we know of its history is that it was discovered at the island of Milo, in 1820, by a Greek, and sold to the French consul for one hundred and seventy francs; and that it now stands peerless and alone at the extremity of a long gallery in the Louvre!<sup>1</sup>

But even while Grecian art was yet in its prime, the great power, which had sprung from so feeble a germ on the banks of the Tiber, had begun that process of absorption which was at last to compass the whole world. Upon Rome the ends of the earth were to come. The Roman was a conglomerate man. Rome gathered in the nations and the culture, as she accepted the gods, of the world. The Roman Parthenon was not simply a divine cluster, but also an ethnic type.

But to no nation did Rome owe a tenth part so much as to Greece: in the earlier part of her history she received it by colonial transmission and international exchange; in the later, she conquered it as the spoils of war. The Roman law was transfused with the principles of Solon and Lycurgus, and thus partook of the culture of Athens and Sparta. There is a germ of truth in the story that the early Pelasgians, driven before the Hellenes, around the head of the Adriatic, had already carried the seeds of art into Northern Italy. Grecian

<sup>1</sup> No little excitement was occasioned in 1877 by a letter from Mr. Read, the United States minister to Greece, in which it was stated that the arms of the figure had been found in the island of Melos, at a distance of less than thirty feet from the spot where the statue was discovered in 1820; but M. Ravaisson, in a paper read before the Academy of Inscriptions and Belles Lettres, on June 8th, 1877, showed conclusively that the arms were not hers.

art had tinctured the Troad, long before Æneas came to the banks of the Tiber and introduced it into Latium.

Southern Italy was so full of Greek colonies that it was known at an early day as *Μεγάλη' Ελλάς*—*Magna Græcia*. The Greek language and literature were fostered in the peninsula: the first Greek grammar ever written was published by Dionysius Thrax at Rome,<sup>1</sup> and was the basis of the Latin grammar of Cæsar, written during the Gallic war, and displaying that great warrior as the inventor of the ablative case.<sup>2</sup>

But the Romans had a distinct and important part to play in the study and practice of art. If they were imitative, they were progressive; they were practical where the Greeks had been largely ideal. They had formed their own local systems, political and religious, and they applied to these what was most useful in Grecian art. At first they were not appreciative of the refinements of Athens; and even later, when they carried miniature temples of captured Corinth in their triumphs, it would have made Democritus laugh, while others wept, to see how little they valued the splendors they had despoiled:

“ . . . . captiva Corinthus,  
Si foret in terris, rideret Democritus.”

But the beautiful art of Greece, by slow and logical processes, cultivated the ruder men of the West, and soon displayed its powerful influence in the splendid edifices which began to adorn the Eternal City. Indeed, Rome soon appeared as the intelligent but selfish inheritrix of the art of the world. From the Egyptians she learned massiveness and strength, from the Greeks adaptation and elegance. To combine all systems and schools, and produce a new composite, was the problem for Roman architects, and they solved it.

The first types of Roman buildings—under the kings—had been on Etruscan models, tombs and sewers and temples—Asiatic forms, tinged with the earlier Grecian. Of these few relics remain, and it may be said that Etruscan art is best studied not in architecture, but in keramics. These types

<sup>1</sup> Max Müller, “ Science of Language,” i., 92.

<sup>2</sup> Farrar, “ Families of Speech,” 24.

were continued down to the commonwealth, and are largely illustrative of the legendary history.

The second period, beginning with the republic, and extending to the empire, is emphatically a Grecian period in art and literature. The third is marked by the progress of Christianity.

Not to dwell, however, upon this historical division, it is important to notice that the Romans added to the existing forms of architecture the *arch* and the *dome*; and, no longer trammelled by right lines, they sometimes used for their ground-plan, instead of the rectangular parallelogram, the circle, as in the Pantheon and the tomb of Marcellus, still existing at Rome; the ellipse, as in the Coliseum, and sections of both combined. Instead of great, square doorways, we soon find the Roman or circular arch, giving beauty of contour and sustaining strength.

It matters little who first discovered the circular arch; simple enough it seems to us; but it was not used as a common and characteristic feature of architecture until the Romans introduced it. The best features of the Grecian temple they still retained, but modified, and happily so, by the circular arch.

This will be at once conceded, if by an effort of the fancy—a very easy one—we restore the Roman forum of the emperors, lying at the foot of the capitol.

Towering on the right rises the purely Grecian temple of Jupiter Capitolinus; on the left are the similar structures of the temples dedicated to Jupiter Tonans, Juno Moneta, and Saturnus; but between is the long line of the Tabularium, or Hall of Records, with its fifteen intercolumnar arches; lower down, on the left, is the Julian Basilica, also arched; while the triumphal arches of Tiberius and Vespasian, surmounted by chariots of victory, give grace and variety to the severer lines of the Grecian temples.

In the hemispheric dome we have the idea of the arch, multiplied to produce a new architectural effect. Resting upon the outer walls, with a lateral as well as a downward thrust, the dome presented a new problem to the builder. In the Grecian buildings, the walls and columns supported little; now they were subjected to a strain which must be met by greater

strength. This was supplied in part by thicker walls, in part by columns, and finally, as a distinct feature of Roman art, by pilasters, which, having columnar effect to the age, were in reality buttresses, adding to the sustaining strength of the walls.

The Coliseum, so notable and massive a structure that the Venerable Bede could say in Latin prose, and Byron repeat in almost the same words, in verse,

"While stands the Coliseum Rome shall stand ;  
When falls the Coliseum, Rome shall fall ;  
And when Rome falls, the world,"

owes something of the enduring strength which impressed the priest and poet to the pilasters, connected by arches, in four stories—the perfect model of sustaining strength. The Coliseum serves, too, as a remarkable illustration of the relations of art and history. It was a great circus in a time when such entertainments were demanded by a Roman populace, loudly clamoring for *panem et circenses*. It takes us back to the problem of the proletaries, the great unclassed and untaxed paupers of Rome, who must be fed and amused to avert their fury. Here were exhibited those fierce gladiatorial combats, the delight of a nation who were still fascinated with blood, even while they were losing the manhood which dared to shed it in battle. Here Christianity appears upon the scene, in the persons of her martyrs who were torn to pieces by wild beasts.

I have often thought that the eventful history to be found in Roman ruins has no more suggestive illustration than the fact that Gibbon conceived the idea of writing the decline and fall of Rome as he sat one evening amid the ruins of the capitol, and heard the barefooted friars singing vespers in the temple of Jupiter—the history of a thousand years, at the beginning of which Jupiter was fervently worshipped in his own fair temple, and at the end of which its ruins formed a chapel-of-ease to the drones of a conquering but corrupted Christianity.

Perhaps the most striking exhibition of Roman architecture, as compared with, and as deviating from, the Grecian models, is found in the Pantheon. Place it in fancy side by

side with the Parthenon. That was an oblong rectangle : the Pantheon is circular in plan ; that was hypæthral : this is surmounted by a dome, one hundred and thirty-two feet across the base, with an open skylight. That was dedicated to one goddess, Pallas Athena, while around were the sculptured tributes to the other deities of a systematized mythology. The Pantheon, if at first dedicated to Jupiter the Avenger, soon became a collectaneum of deities, displaying Roman latitudinarianism and the decline of faith. To retain what was stately and beautiful of the Greek temple, Agrippa, the nephew and son-in-law of Augustus, placed in its front a square portico, the pediment of which was supported by eight Grecian columns, presenting an imposing façade, one hundred feet in length, and opening into three halls or naves, supported by similar columns. Thus one passes through Greece into Rome.

The idea that it derived its name from the purpose of the builder to make it a repository of all the gods may be repudiated ; it may be received that the sole light, through an opening in the cupola, gave a glimpse of the divine radiance, as though heaven, *with all its gods*, was let down to earth. The truth is, however, that it did become the receptacle of the gods of all nations, and that the name has thus a peculiar significance. This thought must have been in the mind of Boniface the Fourth when he consecrated it as a Christian temple in 610 to *All Saints*, and established the festival of All Saints' Day in memory of that consecration.

It has been despoiled and repaired many times, but it remains to-day in its original form and design to teach the fullest lesson of Roman architecture at the beginning of the Christian era. It was a happy thought of the men of the Renaissance to bury the great Raphael there ; like Chaucer at Westminster, he has gathered about him the sacred dust of many generations of artists.

Under Augustus and the succeeding emperors, the seven hills of Rome and the suburbs were dotted with palaces, built of marble and lavishly adorned with gold and silver. Chief among these was the Golden House of Nero, built after the fire, which occupied the site of the old palace of Augustus and the villa of Mæcenas. It threatened in its extension to

compass the whole city, while he boasted that he was lodged at last as a man should be :

“ Se quasi hominem jam habitant coepisse.”

It must be borne in mind that the architectural splendors of Rome at this period are always referred to public edifices and the palaces of the great. The dwellings of the people were very different ; they were divided into two classes, the *domus* and the *insulæ*, which by no means kept pace with imperial and aristocratic extravagance. The *domus*, indeed, a detached house, of a noble man or one of the higher classes, at first small and inconvenient, began soon to be enlarged and enriched, but the *insulæ*, or islands, were tenement houses, crowded together in the lower parts of the city, rising from seven to ten stories, and in these the common people were hived like bees.<sup>1</sup>

I have been limited, in illustrating my subject, to the selection of very few of the great structures of Rome. They are all full of historic interest, and will well repay the student of history, as well as the student of art.

V. But the chapter of pagan art was now about to close, with the progress of Christianity and the establishment of the Christian empire. The great religious systems of the world, as we have seen, had everywhere subsidized art—in Egypt, Greece, and Rome. The greatest of all had come, and the revolution was to be in proportion to its august demands.

Thus we find in the days of Constantine the Basilica, first a hall in a patrician mansion, then a church, with main aisle and side aisles, or nave and wings. The progress was rapid and immense. The first efforts of Christianity in this direction were to apply and to transmute every thing in pagan art to the worship of the true God. At the last it was to prescribe its own systems, but before this could be done it adopted the existing forms and designs in its sacred structures.

Thus, while all over the Roman Empire, in the earlier days of Christianity, we find classical ideas still prevalent in new edifices, from the period of Constantine many a purged pagan temple became, with little alteration, a Christian church.

The powerful influence of Constantinople, on the confines

<sup>1</sup> See Merivale, “ History of the Romans under the Empire,” iv., 392.

of Europe and Asia, soon made itself felt, and for three hundred years, until the beginning of the eighth century, there was a struggle in Christian art between what are known as the early Romanesque and the Byzantine forms—a struggle which is equally displayed in the politics of the East and West, even after the fall of the western empire, and in the rivalry between the Latin and Greek churches, even to this day.

Among the structures which display this struggle with a predominance of the Byzantine is the splendid church of St. Sophia at Constantinople, built by Justinian in 529. It was twice conquered by the Moslemah, and twice converted into a Mohammedan mosque. Cruciform, with interior pillars, in two stories, supporting a mighty dome, it has won the admiration and heard the prayers of the Turks for many centuries ; but there is a promise that “ the inexorable logic” will soon bring about its re-conversion, and that when once more a Christian temple it will never again be a Mohammedan mosque.

Of the influence of Byzantine art in Europe, the most remarkable illustration is found in the buildings upon the exquisite little piazza at Venice—the church of St. Mark and the ducal palace. They partake of several systems and illustrate a varied history ; and we are fortunately familiar with their details through Mr. Ruskin’s “ Stones of Venice.”

“ When sensuality and idolatry had done their work, and the religion of the empire was laid asleep in a glittering sepulchre, the living light rose upon both horizons, and the fierce swords of the Lombard and Arab were shaken over its golden paralysis.”

“ Opposite in their character and mission, alike in their magnificence of energy, they came from the north and from the south, the glacier torrent and the lava stream ; they met and contended over the wreck of the Roman Empire ; and the very centre of the struggle, the point of pause of both, the dead water of the opposite eddies, charged with the embayed fragments of the Roman wreck, is Venice. The Ducal palace of Venice contains the three elements in exactly equal proportions —the Roman, the Lombard, and the Arab. It is the central building of the world.”<sup>1</sup>

<sup>1</sup> I cannot dwell upon the wonders of the church, but the bronze horses are the best exponents of Venetian history. They were executed by Lysippus at Rhodes,

VI. The supremacy of ancient art was at an end. The northern barbarians, who conquered Europe, had for their object to destroy, and not to construct, until quiet settlement and rest from war changed them from marauders into civilized peoples. Then there was a happy introduction of the Gothic system, to which, in combination with the others, we owe many of the magnificent cathedrals of Europe. The pure Gothic held sway until the beginning of the fifteenth century, when the great revival had begun, after which a composite order was adopted, which borrowed from all the schools, and formed the most beautiful designs.

The Gothic order deserves, let me say in passing, the critical study of the historical scholar ; there is significance in all its parts—in the wedge-shaped roof, the cruciform plan, with nave, choir, chancel, and transepts ; the lancet and rose windows filled with scripture stories in stained glass ; the strong but delicate interior columns ; and, more distinctive than all, the Gothic arch, in doors and windows, formed by two arcs of circles, usually intersecting in a vertical angle of sixty degrees. The interior pillars are separated by such arches, and it was no very strained fancy—if only a fancy—that the idea was taken from overarching forest trees, joining their branches, and thus forming intervening glades, beautiful and solemn, the very form and varying shade of which should induce a devotional mood. Ruskin enumerates justly among the elements of the Gothic, savageness, naturalness, changefulness, and the grotesque. There was at once aspiration and independence ; the inner roof, or roof proper, conformed to the Gothic arch, and the outer, or roof-mask, terminated in a gable. If the builder wanted windows, he was trammelled by no rule ; he could put them anywhere. Thus the aspiration was in design, and the independence in construction ; and these very qualities tended to the decline of the system, for they led to higher and more useful forms.

Thus, in brief, we reach the period of the *Renaissance*. What was that? for, in speaking of European art, we must constantly refer to that period and that name. It means, according to its etymology, a new birth, a regeneration. It was in reality nothing less.

for the chariot of the sun ; thence taken to Chios, from which they were removed to Constantinople, to Venice, to Paris, and back again to Venice.

When the minds of men were waking from the death-like torpor of the middle age, to grapple with the superstitions which had bound them "in misery and iron ;" when the great inventions and discoveries were about to appear ; when the Reformation had gathered strength to tear and purge the western church, so profound had been the lethargy and so difficult the rousing that history calls the great impetus a *revival* of learning, and the new departure in art a *Renaissance*, or new birth. If the thrill was principally felt in painting, it was also powerful in architecture. Here it was of the nature of a compromise—an effort to go back and select what was best in the principles and details of classic art, and adapt it to the modern forms, tastes, and requirements. That the renaissance in architecture, as well as painting, should begin in Florence was due to the proud position which that favored city had already assumed towards the progress of the world.

Thus the fifteenth century was the age of great churches, rapidly expanding into magnificent cathedrals ; and Florence produced and cherished veritable giants in those days, to whom the works of former ages seemed the erections of pygmies. First among the revivers was Alberti, who built the churches of San Francesco at Rimini, and those of St. Ambrose and St. Sebastian at Mantua ; he died in 1472. Then comes the great name of Bramante d'Urbino, who has left us the church of Sta. Maria delle Grazie at Milan.<sup>1</sup> He has gained something additional in historic repute by being the uncle of Raphael, and one of the early architects of St. Peter's.

But what had been done was as nothing compared with the splendid success of Brunelleschi, who crowned the Basilica of Florence, which had been more than one hundred and fifty years in building, with a dome, still the wonder of all beholders, one hundred and thirty-eight feet in diameter at the base, one hundred and thirty-three feet in height—its top rising three hundred and eighty-seven feet above the square. Among the wonders of European architecture the Duomo still holds a proud place.

While Luther was preparing his great work in Germany, the sale of indulgences, against which he fulminated his righteous

<sup>1</sup> The list is long and interesting, and may be found in Fergusson's "History of Modern Architecture."

wrath, had enabled the pope to project the completion of the stupendous monument to St. Peter, upon the spot where an unsupported tradition declared the apostle had suffered martyrdom<sup>1</sup> by crucifixion. The reputation of Bramante gained him the honor of being the first architect of this new design. He died in 1514, and was for a brief period succeeded by his nephew, Raphael; but it seems fortunate for the world of art that Michael Angelo Buonarotti was alive.<sup>2</sup> When Gallo died in 1546, Julius II. employed Michael Angelo to superintend the erection, and make it the grandest temple and mausoleum in the world. There was no interference with the architect, and no stint of money. The papacy, far-seeing and all-grasping, was working for a grand purpose.

Colossal in conception and equal in execution, Michael Angelo declared that he would hang the Pantheon in air. He gave the impulse and perfected the plans for carrying out their purpose; but, being seventy-two years old, death overtook him just as he had erected the tambour-work for the dome; his clear eye foresaw, however, the completed structure as we see it to-day. The dome, it must be observed was the chief problem. The low, hemispheric covering of the Pantheon was, up to the time of Brunelleschi, the greatest object of emulation to architects, and it was and is the glory of that artist that he had dared to lift in air so colossal a crown as the dome of the Florentine Cathedral. But that dome is polyangular; while that of St. Peter's, "acquiring dignity from the drum on which it is elevated, lightness from the pendentives on which it is placed, and unity from its circular plan, so far superior to the angular form of its Florentine rival, carries out far more closely

<sup>1</sup> Another spot is pointed out, but the guide-books, which, on such a popular subject, should be well informed, claim this as the place. Speaking of the former structures, Baedeker says of that of Constantine: "C'était une basilique à cinq nefs, avec un transept, s'élevant sur l'emplacement du Cirque de Néron, où St. Pierre souffrit le martyre." Italie Centrale, 216.

<sup>2</sup> It is interesting to notice the antecedents of St. Peter's. Constantine had built a basilica, at the instance of Pope Sylvester I. It was in this that Charlemagne received the imperial crown, in the year 800, from Leo III. This edifice was in ruins when the project of a magnificent temple was set forth by Nicholas V., who, in 1450, employed Rosselini as his architect. The work progressed very slowly. Plans were presented by Bramante and Gallo; the form of cross—Latin or Greek—was long in question, until Michael Angelo decided for the latter.

the object avowedly aimed at, to raise the dome of the Pantheon and suspend it in the air."<sup>1</sup>

The dome of St. Peter's is a grand manifesto at once of art and history, when it blazes with fire on nights of high festival—the grandest, perhaps, which the Latin church, with all its vespere and splendor, can beacon forth to the world.

We are accustomed to consider the Reformation of Luther, which accomplished so much for the world, as a mighty but simple effort to restore religion to its primitive gospel purity. It was this, but it was far more than this. It was the effort of mind to throw off its thraldom. It was the struggle of freedom, in the guise of a fierce democracy, to get rid of oppressive authority, political and religious.

So, with the religious parties in the contest there were violent political factions: witness the peasant war, which arose after Luther's manifesto, and in which—as in England in the demand for the charter, and in the Barons' war—nobles led, because the peasants' cause, however intemperately championed, was the cause of mankind. Authority triumphed in the main, and for the time, in the persons of the emperor and the pope, because they had system and arms and material and prestige. The famous Council of Trent, called to consider the appeal of the Protestants from the decision of the pope, set forth indeed articles of dogmatic theology, and thus fixed and established theological errors and superstitions; but it did far more: it effectually perpetuated the temporal power of the pope and the inherited claims of the Roman Catholic princes; and, still further, and most germane to our subject, it subsidized, with haste and lavishness, art of all kinds to strengthen its efforts.

To return to St. Peter's, in this immediate connection: the erection of this magnificent church at Rome marks the sagacity of the popes in the conduct of this controversy. All the later history has shown that the power and influence of that single edifice, in supporting the claims of the Latin church, are simply beyond calculation. While the new enlightenment denied the claims set forth for the apostle to whom that cathedral was dedicated; while it was boldly declared, in the face

<sup>1</sup> See C. C. Black's "Michael Angelo Buonarotti," p. 115.

of time-sanctioned assertion, that St. Peter was never bishop of Rome, but more probably bishop of Antioch ; while it was becoming clear that the Roman primacy was but an outcome of the supremacy of the city of Rome, so long the capital of the world—this, the grandest of temples, poised its massy dome, with the surmounted lantern, over the spot simply declared, without even a tittle of traditional proof, to have been the place of the apostle's crucifixion, and asserted the vicarage of Christ and the claim of exclusive authority. It appealed to the eyes and the ears of the world, and it has not appealed in vain. Ignorant and obedient multitudes accept the august testimony, and, in the latter half of the nineteenth century, although the temporal possessions of the pope have torn themselves from his holding, the holy days at Rome bring throngs to the splendid shrine from every nation under heaven, and systematic pilgrimages, as devout as those that swarm to Mecca, fill with worshippers this home and head-quarters of the Roman Catholic Apostolic Church.

Thus the great cathedral age was one of Roman Catholic assertion against Protestant reformation. The cathedral germ had indeed been planted long before, during the middle ages, but it was “fostered into might” by this opposition. As the Protestants became more importunate, blind faith became also stronger, and popes and princes hastened to show their rekindled zeal by erecting or completing these splendid temples.<sup>1</sup>

VII. I have not intended in this paper to give any systematic view of Christian architecture in the modern period, but only to present a few suggestive illustrations ; I cannot, however, leave the subject without calling the attention of the reader to the wealth of history contained in the structures of Spanish art. Here the student is truly embarrassed by his riches. To the ordinary and rapid traveller Spain presents a conglomerate of architecture, but to the patient scholar there is disclosed a system in the midst of this labyrinth. There are Roman remains, Gothic ruins, Arabian mosques and alcazars, cathedrals of the Renaissance, Tuscan enormities, and modern French palaces—each set marking a great historic period, full of interest and romance. In no country is it so true—true as it is everywhere

<sup>1</sup> All the great English cathedrals were built by the Roman Catholic Church, and became Anglican and Protestant at the Reformation.

—that art is the interpreter of history. I pass by the more picturesque illustrations, which are chiefly Moro-Arabian, to dwell for a moment upon two which contain a volume in themselves.

The first architectural work of the Renaissance in Spain was the Cathedral at Granada, a building that stands in the boldest contrast to the far-famed Moorish palace of the Alhambra, on the neighboring eminence ; the contrast is eminently historic. The Cathedral was begun in 1529, only thirty-seven years after the Moorish city—the last foothold of Islam in the peninsula—had fallen into the hands of Ferdinand and Isabella. Their grandson, Charles V. of Germany, was on the throne of Spain, the church-hero of the anti-reformation.

The Cathedral is a noble structure, four hundred feet long and two hundred and thirty wide, with side chapels, that of the king being of special historical interest. Poetic justice built it on the site of the great mosque, and made this royal chapel (Capilla de los Reyes) the burial-place of Ferdinand and Isabella, of Philip and Joanna. The chapel was built before the Cathedral by order of the joint sovereigns, who, as the inscription says, “crushed heresy, expelled the Moors and Jews from these realms, and reformed religion!”<sup>1</sup> There are the splendid Italian tombs, with reclining effigies of the great monarchs, and in a small vault below are the rude leaden coffins, with simple initial letters, containing their remains. As the awe-inspired visitor lays his hand upon them, he feels nearer to the history than ever before—to the romantic conquest of Granada, to Columbus and the great discovery ; and the feeling is intensified when, passing from the place of tombs, he is shown, in the adjoining sacristy, the box which had once contained the jewels sold or pawned by Isabella to fit out the expedition of the great admiral, and the plain sword which Ferdinand wore in his campaigns against the Moorish kingdom.

Take the second illustration, which is even more pertinent than that just presented. When Philip II., the greatest of royal bigots, whose allies were hardly pressed at the battle of St. Quentin, on the day of St. Lawrence, his patron saint, made a vow of gratitude for the victory, he displayed, in its fulfilment, the morbid piety of his father and the insanity of his grand-

<sup>1</sup> O’Shea’s “Guide to Spain,” 197.

mother, Crazy Jane. "He was the proudest among kings, and the most devout among monks, and it was not all his fault if he built convents that look like palaces, and palaces that were also convents." In compliance with this vow, the Escurial was built, to become the abode of a gloomy ecclesiastical despotism. It was a fancy—not founded, however, on any thing in the *Carta de dotacion*, or any thing which he has left—that it was built in the form of an inverted gridiron, to represent the mode of St. Lawrence's martyrdom. The long interior courts are supposed to form the spaces between the bars, and the corner towers the feet; the palace is the handle. Be that as it may, it tells the tale of that fearful reign, in every part.

Erected on a great square of seven hundred and fifty feet, nearly equal to the base of the pyramid of Cheops, it contains a palace, a convent, a library, and a church. The site was appropriately chosen—ten leagues from the gayeties of Madrid, on the rocky, wild, and secluded side of the Guadarrama. The church within it, undisclosed from the exterior, is of Græco-Roman architecture, the Doric predominating. Even among churches it is colossal, being three hundred and twenty feet long, two hundred and thirty wide, and three hundred and twenty high, to the top of the cupola.<sup>1</sup> Below is that curious mortuary chamber in which are ranged, tier above tier, the coffined remains of many Spanish kings and queens—a ghastly sight in the glare of torches or by the light of the central chandelier—the most unpleasant *memento mori* I have ever witnessed.

The Escurial is unrivalled as a historic landmark. "What Versailles is to France and to the history of the French Renaissance architecture, the Escurial is to Spain and its architectural history; they are both of them the greatest and most deliberate efforts of the national will in this direction, and the best exponent of the taste of the day in which they were executed."<sup>2</sup>

An analytical examination of French architecture will be full of similar historical instruction; it can only be suggested, without illustration.

VIII. To go back in the calendar, it will be observed that

<sup>1</sup> Just off the high altar, and opening upon it, is a small chamber into which Philip was taken to die, while his glazing eyes looked their last on the elevation of the Host.

<sup>2</sup> Fergusson's "History of Modern Architecture."

nothing has been said of Roman statuary. The reason is obvious : there is very little that is distinctive. For this form of art the Romans had little taste and less appreciation. As they conquered Greece, they carried off the best works of sculpture. "How little they were prepared to appreciate Grecian art is illustrated in Mummius, who threatened the laborers packing the paintings and sculpture taken from Corinth, that if any were injured or lost they would have to make others ! Even Pliny himself exclaims, 'What use can be perceived as derived from them ?'"<sup>1</sup> A few Greek statues were imitated ; rude and amorphous equestrian figures were produced, but the great art seemed lost during the later Roman supremacy.

And this brings us to the consideration of a strange explanatory fact : this poverty of sculpture was in great part afterwards due to Christianity itself. The Church, which had from the first so splendidly fostered architecture, and was soon to foster painting, for its own purposes, was to sculpture a power of injury and degeneracy.

In place of ideal figures, of perfect form, in pure marble, or in ivory and gold ; as the adoration of saints and of the Virgin grew stronger, images were wanted for shrines. In most cases form was ignored, for they were to be clothed in costly dresses, and adorned with gold and silver and precious stones. They were no longer designed to elevate critical taste, but for the worship of the superstitious multitude. Then they were carved in wood, such as those known to the Greeks as *ξοάνα* ; and later they were fashioned in baked clay—*terra cotta*. These colored and bedecked images, especially those of the Virgin, were more pleasing, not only to the multitude, but to the higher orders, in an ignorant age, for what they lacked in grace and genius was more than made up in sanctity. This was at least one great cause of the utter degeneracy of sculpture in Christian Rome and during the middle ages until the great revival.<sup>2</sup>

<sup>1</sup> Samson's "Art Criticism," 186.

<sup>2</sup> In the church of the Atocha, at Madrid, is a very old black and ugly image of the Virgin, carved by St. Luke ! and brought to Spain by St. Peter ! The Beloved Physician was a far better gospeller than image-carver. It is laden with jewels, surrounded by relics, noting miraculous cures, and its wardrobe is enriched yearly with the dress worn by the queen on the feast of the Epiphany. (See Ford's *Hand-Book*, ii. 711.)

I am inclined to think that the ugliness and unreality of sacred art had something to do with the zeal of the early iconoclasts ; the superstition was as manifest as in an African Greegee or fetish ; and this set the Eastern Church at work against carved images in every material. The first sagacious act of Leo the Isaurian was to assemble a great council of bishops and senators, who thought to mend the matter by decreeing that all images should be placed at such a height in the churches that they might be visible, but inaccessible to the worship of the people. Then came a second edict against pictures, and soon the churches of Constantinople were dismantled of all such representations, and had a smooth plaster surface on the inner walls. But the ignorant and superstitious multitude felt themselves defrauded, and rose furiously against the iconoclasts. The question convulsed Christendom ; not only was there strife between the East and the West, but in each province and in each city the two parties were arrayed against each other.

While the war has ceased, the controversy has never been fully decided, but presents itself to our consideration in this day of light and progress as one of those small but important questions—*nugae difficiles*—in which is found the conflict of the abstract and the concrete, the issue between a simple principle and its practical consequences.

It would seem that temples dedicated to the Almighty may be fittingly adorned, for in this we have the sanction of God himself in the elder dispensation. In a Christian church, what at first sight seems more proper than that representations in wood or marble, or in the richest style of pictorial art, of Christ and the Christian apostles should be displayed ? The words of the preacher draw for us delineations of our Saviour and his earthly history ; the tenderness of the Virgin Mother, the shame of the persecution, the agonies of the crucifixion : why should not the artist do the same, and leave them in perpetual memory where men congregate to meditate on these solemn subjects ? Abstractly there is no reason why this should not be. But let us look at it in the concrete of history. The statue was placed in a niche and became a shrine. The speaking picture became not only a symbol, but an object of superstitious regard—a worker of miracles, an impudent usurper of the power of God.

Then, to the ignorant men and women who could not understand doctrine, the saint became nearer if not greater than the Almighty, and made his bargain with heaven for his clients ; and so the supreme idea of the unity of God, daily asserted in creeds, was practically as much ignored as in any system of pagan idolatry.

Thus in earlier days the beauties of art were perverted by the waywardness and ignorance of the multitude, and became an instrument of enormous evil. And the lesson remains : as long as waywardness and ignorance and superstition exist among men, the danger stands before us.

I have hinted at the *unreality* of Christian art. By this I do not mean to refer only to that which is grotesque and unskilful, but also to those works which, however finished and lovely, do not represent to us the true ideal. It has been justly said by Ruskin, after a large review of the subject, that religious art has not been of service to man, because it has not been complete, just, and sincere. In this respect it is worse than bad preaching and bad music, for those may be more readily removed or corrected. If art is beautiful but false, it is the more injurious ; we are inclined to become devout towards it rather than towards God.

I have been confined, by the limits of this paper, to a few illustrations of architecture and statuary, brought together to commend a new method in the study of history as a science. The subject of painting is even richer in this relation, and the interest excited in the great numbers of our people who frequent the magnificent galleries of Europe gives it a popularity and intelligent appreciation in this country which never existed before.

If the American traveller would awake to this historic view, and not be satisfied with mere form and color, light and shade—with “what pleases him”—but see in every great work its lesson of historic philosophy, in every period and school the interpretation of national character and progress, Art would not indeed cease to entertain, but would add useful instruction to entertainment, and exalt many a virtuoso and dreamer into a historian and philosopher.

HENRY COPPÉE.

## TAXATION OF THE LIQUOR TRAFFIC.

SPECIALISTS are prone to magnify, not perhaps the absolute, but the relative value of their work ; and if it lies in the direction of an attack upon any evil, to exaggerate the evil itself. But a man of the breadth of scholarship and of view of Dr. Temple, the present Bishop of Exeter, said, a few years ago, in measured phrase, that " of all the preventable evils of the world intemperance was the greatest." Whether the reader will assent to the whole sweep of this statement may resolve itself into a question of definitions. But it seems to us that there must be a general concurrence of all thoughtful minds in the declaration of Charles Buxton, the English brewer and Member of Parliament : " That if a statesman who heartily wished to do the utmost good to his country were thoughtfully to inquire which of the topics of the day deserved the most intense force of his attention, the sure reply—the reply which would be exacted by full deliberation—would be, that he should study THE MEANS by which this worst of plagues can be stayed."

Of course it will not be understood that "*the means*" embraces only measures of legislation. The battle against intemperance is a battle against an inward as well as an outward foe ; and, as some one has tersely put it, " we are interested both to keep the man from the drink and the drink from the man." It is plain that the aggregate amount of drunkenness depends on the presence of the two factors, appetite and temptation, and that whatever diminishes either diminishes the product ; and even beyond this the sight of the temptation not only involves the opportunity for the gratification of the appetite, but its excitement, its growth, and its persistence. Law, therefore,

which has to do with the temptation, has much to do with the solution of this great problem.

Even the most thorough advocates of what Huxley calls "Administrative Nihilism" in government have had to acknowledge that the traffic in intoxicating liquors is of such an exceptional nature as to require, at least in the way of police regulation, unusual interference by the State. And in all highly civilized countries, especially in Great Britain and in the United States, the history of legislation shows a constant effort to restrict and restrain the traffic in the public interest. The general modes resorted to have been License and Regulation, both being more frequently combined; the object of license being to determine *who* should sell, and the object of regulation being to determine *how* and *when* the sale should be made. Our forefathers seem to have had a long and persistent trust in the system of license. Their theory was that the fruits of the liquor traffic depended on the personal character of those engaged in it. It would have been wiser to have observed that, as a general thing, the personal character of those engaged in the traffic partook of the character of the traffic itself, and that the

"Nature is subdued  
To what it works in, like the dyer's hand."

It is curious to see how long and persistently the double delusion was cherished, that it was possible to confine the traffic in intoxicating liquors to "respectable" retailers, and that, if so confined, the effect of the alcoholic poison would in some way be neutralized or modified by a transmutation into the liquid of the virtues of the rumseller. Thus, in Massachusetts, the old Puritans and their descendants for a long series of years required what has been called "the double imposition of hands" to set apart men as worthy to deal out this poison to their fellow-citizens. After repeated amendments, the system of laws finally established required the selectmen of the different towns to take a special oath, "faithfully and impartially, without fear, favor, or hope of reward, to discharge the duties of their office respecting all licenses, and respecting all recommendations." They were then to determine what number of licenses they judged "to be necessary for the public good," and thereupon they

were to recommend to the County Court of General Sessions only such persons as they should approve "as a person of sober life and conversation, suitably qualified and provided for the exercise of such an employment, and firmly attached to the constitution and laws of this commonwealth" (or, as expressed in another statute, "he being, to the best of our knowledge and belief, a person of good moral character"); and armed with such a recommendation the applicants were to present themselves to the Court of General Sessions and undergo the ordeal of their judgment before they obtained a license. With all this machinery (and much more) a Committee of the Massachusetts House of Representatives, of which the Hon. Linus Child was chairman, reported in 1838 that "it may well be doubted whether intemperance would have increased with more rapid strides if no legislative regulation of the sale of intoxicating liquors had ever been made."

A similar despairing cry comes to us from the other side of the Atlantic after full trial of the system of license. Perhaps there is some exaggeration about it; for we are disposed to assent to the position of Recorder Hill, of England, in his volume on "The Repression of Crime," that "the traffic in alcoholic drinks obeys that great law of political economy which regulates all other commerce—viz., that any interference with the free action of manufacturer, importer, vender, or purchaser, diminishes consumption." And wherever the experiment of free-trade in intoxicants has been tried, this law has been verified inversely. But still it is true that as a remedy for the evils and dangers of the liquor traffic license has proved a sad and miserable failure.

Taxation, either in the form of a direct tax upon the liquors themselves, or as a special tax upon the occupation of the vender, is not entirely a new experiment. Taxation of spirits has been a constant source of immense revenue in Great Britain; and since the civil war in the United States we all know the large contribution thus made to our own national revenue. Nor have there been wanting attempts both in England and in our own country to restrict the traffic itself by such impositions. By the memorable act of the 9th George II., chap. 23 (1736), it was enacted that spirits should not be sold in less than two

gallons without a license, for which £50 was to be paid ; and a direct duty of 20s. a gallon was levied when sold in such quantities. When we consider the relative purchasing power of money at that day, this was a severe tax both upon the business and upon consumption ; and the striking words of the preamble<sup>1</sup> show that it was intended to operate as a powerful check upon the traffic. But this well-meant effort proved an entire failure. The law abounded with fatal facilities of evasion, and though for a time the government strove vigorously to enforce it, yet the historian (Tindal) tells us that “ within two years of the passing of the act, although 12,000 persons had been convicted of offences against it, it had become odious and contemptible ; and policy as well as humanity forced the commissioners of excise to mitigate its penalties.” The sales even largely increased. “ The consumption of spirits in England and Wales rose from 13,500,000 gallons in 1734 to 19,000,000 in 1742, and there were within the bills of mortality more than 20,000 houses and shops in which gin was sold by retail. Dr. Lees, recognizing the purpose of Parliament “ to annihilate the traffic in gin and strong waters,” draws this conclusion : “ The fault lay in the want of progressive preparation for that final result most devoutly to be wished ; since the governmental power must never be strained too far nor exerted too suddenly without a moral power to support its tension.” The government yielded, and the act was repealed in 1743, but with a memorable protest in the House of Lords. While no subsequent act has had so distinct a purpose, yet it is evident that some incidental regulation of the traffic has entered into the revenue bills, and some favorable effect upon consumption has appeared to follow an increase of taxation. But, still, little reliance has been placed upon this as affording any substantial regulation or restriction of the trade.

<sup>1</sup> This ran as follows : “ Whereas the drinking of spirituous liquors or strong liquors is become very common, especially among the people of lower and inferior rank, the constant and excessive use whereof tends greatly to the destruction of their health, rendering them unfit for useful labor and business, debauching their morals and inciting them to perpetrate all manner of vices, and the ill consequences of the excessive use of such liquors are not confined to the present generation, but extend to future ages, and tend to the degradation and ruin of the kingdom.”

In the United States, not only the steady imposition of duties upon imported liquors, but the occasional taxation of the business of selling and of the sales themselves, has been resorted to as an important source of public revenue ; but it has been with little attention to the effect upon consumption, and with but little practical result in this direction. I am not aware that heavy taxation has ever been proposed in the national legislature in the interest either of prohibition or restriction, although such legislation was suggested by John Adams many years ago, after he had become a private citizen. Under date of August 28th, 1811, he writes to his friend Mr. Rush : " Fifty-three years ago I was fired with a zeal, amounting to enthusiasm, against ardent spirits, the multiplication of taverns, retailers, dram-shops, and tippling-houses." He then goes on to relate the fruitlessness of his crusade against them, and continues : " You may as well preach to the Indians against rum as to our people. Little Turtle petitioned me to prohibit rum to be sold to his nation for a very good reason, because, he said, I had lost three thousand of my Indian children in his nation in one year by it. Sermons, moral discourses, philanthropic dissertations, are all lost upon this subject. Nothing but making the commodity scarce and dear will have any effect." And then he adds, but " if I should recommend heavy prohibitory taxes upon spirituous liquors, which I believe to be the only remedy against their deleterious qualities in society, . . . would say that I was a canting Puritan, a profound hypocrite, setting up standards of morality, economy, temperance, simplicity, and sobriety that I knew the age was incapable of. " <sup>1</sup>

John Adams, it will be observed, speaks of " *prohibitory taxes.* " Nothing like these have ever been imposed either by National or State authority ; but we now proceed to notice certain current experiments, in State legislation, of taxation upon the liquor traffic, having for their professed object the regulation and restriction of that traffic.

The Constitution of the State of Michigan, adopted in the year 1850, contained this clause : " The legislature shall not

<sup>1</sup> Works, vol. ix., p. 637.

pass any act authorizing the grant of license for the sale of ardent spirits or other intoxicating liquors."

Upon the repeal of the prohibitory law in 1875, this provision of the constitution being then still in force, the legislature, being inhibited from passing a license law, resorted to a system of taxation. By the act of May 3d of that year there was imposed a tax of \$150 "upon the business of selling or offering for sale spirituous or intoxicating liquors by retail, or any patent medicine, mixture, or compound which in whole or in part consists of spirituous or intoxicating liquors;" and a tax of \$40 (subsequently increased to \$50) upon the selling of "fermented or brewed liquors." The tax for wholesale dealers in spirits was fixed at \$300, and in malt liquors at \$100. Specific taxes, proportioned to the amount manufactured, were also imposed upon distillers and brewers.

The constitutionality of this law, as is the case with all laws touching the liquor traffic, was soon assailed; and in October of the same year the opinion of the Supreme Court of the State sustaining the law was delivered in the case of *Youngblood vs. Sexton* (32 Mich., 406), by that eminent jurist, Judge Cooley. In discussing the objection that taxation was in effect a form of license, he says: "The idea that the State lends its countenance to any particular traffic by taxing it, seems to us to rest upon a very transparent fallacy. It certainly overlooks or disregards some ideas that must always underlie taxation. Taxes are not favors; they are burdens; . . . it would be a remarkable proposition that a thing is sanctioned and countenanced by the government when this burden, which may be disastrous, is imposed upon it, while, on the other hand, it is frowned upon and condemned when the burden is withheld." The court, as a decisive consideration, pointed out the fact that in the absence of any law of prohibition the negation of license under the constitution simply left the traffic free, and that the tax law did not assume to make the business *unlawful* if the tax were not paid. "A failure to pay the tax no more renders the trade illegal than would a like failure of a farmer to pay the tax on his farm render its cultivation illegal. The statute has imposed the tax in each case, and made such provision as has been deemed needful to insure its payment; but it has not seen fit to

make the failure to pay a forfeiture of the right to pursue the calling. If the tax is paid the traffic is lawful ; but if not paid the traffic is equally lawful. There is consequently nothing in the case that appears to be in the nature of a license."

The liquor dealers probably arrived at the conclusion that their business was "equally lawful" whether the tax was paid or not before this decision of the Supreme Court, and the civil liability to the tax-collector had no great terror for many of that vagrant and irresponsible class. Governor Bagley, an advocate of the tax law, says, with remarkable *naïveté*, in his retiring Message of January 1st, 1877, in phrase more expressive than elegant, "There seems to be something peculiar in this business, and it requires tying up tight." The legislature were of the same opinion ; and by the act of May 23d of that year they made it a penal offence for any one to engage in the traffic without first paying the tax provided by statute. Whether this change in the law is such an approach to a license as to take the case out of the opinion of the Supreme Court above cited, has become an immaterial question, since the clause of the constitution referred to has been stricken out by popular vote subsequent to that decision.

What are the results of this legislation ? In the Message of Governor Bagley before alluded to he gives the amount of taxes collected for the year 1875 as \$461,462.92, the number of dealers assessed as 4974 ; for the year 1876, the amount collected as \$384,387, and the number of dealers 4553. While he confesses the law to be imperfect, he considers it to be a success. The incoming Governor Croswell, in his inaugural immediately following, speaks more cautiously, and says : "In fact, hardly a sufficient time has elapsed since their validity (the laws now in force) was affirmed by the Supreme Court to give them a fair trial." As the legislative sessions of Michigan are now biennial, we have no later official returns than those above given ; and I am informed by gentlemen from that State well qualified to express an opinion that the figures recently given in the newspapers are unreliable. It is but fair, however, to concede that for the last two or three years there has been some diminution in the aggregate number of places in the State where liquor is sold. It is not so easy to say how much of this decrease is to be

attributed to the hard times, how much to the temperance revivals, and how much to the law. I am not disposed, however, to deny that the transition from a prohibitory law *unenforced* in the large cities, to a tax law which the authorities exerted themselves to make effective, would in those places, especially if the imposition of a considerable tax were coincident with the loss of customers and the depression of business, operate to discourage the smaller dealers and drive some of them out of their occupation. But, on the other hand, a memorial to the legislature of 1877, presented by a responsible committee, states as the result of "a vast amount of unofficial yet very trustworthy information obtained from various sections of the State," that "this diminution has been nearly made up by increasing the number in smaller towns, and by the establishment of the business in places where, by force of moral sentiment and the enforcement of the old prohibitory law, the traffic had been nearly or entirely suppressed." This result is so obviously the natural one that it must be accepted as true.

In calculating the immediate and visible gains and losses from this system of legislation a net decrease of the number of liquor-shops in the State is by no means to be accepted as a decisive test. Two considerations of very great importance are to be weighed.

In the first place, it is to be observed that it is not an accurate statement of the general law to say that, other things remaining the same, the amount of drinking depends on the number of liquor-shops, but rather that it depends on the temptations and facilities afforded. In large cities some percentage of reduction might be made in the number without reducing either. Indeed, it is possible not only to leave the facility of indulgence as great, but to actually increase the temptation by consolidating the traffic in the hands of those who are able thus to throw around it tasteful accessories and to make it outwardly attractive.

But if it is doubtful whether any substantial gain has ensued in the larger places from such diminution in the shops as may be fairly attributed to this policy, it is not doubtful that a sad loss has ensued wherever the traffic has gained a new footing in a rural community. There is something so startling in the aspects of wickedness in our large cities, that the attention of Christian

philanthropists may become too exclusively devoted to them. It is, after all, the country that has made the town. Strike out of the list of the active professional men and the merchants of our capitals the men who have come in with characters formed in rural homes, and how wonderful would be the change! If the city is the source of influence, the country is the constant supply of power; and the life of the State depends on the reservoirs of physical, intellectual, and moral strength that are stored there.

The Moffat Law, so called, is a variation of the tax system which has been adopted in Virginia and Louisiana, and already received with considerable favor in other States. It provides for the use of an instrument which is designed to secure the registration of every drink, and requires the dealer to pay a tax of two and one half cents for each glass of spirituous and a half cent for each glass of fermented liquor which he sells. It is supposed that such a scheme will permit the collection of a larger revenue with more uniformity, simplicity, and economy of administration. I shall not discuss its merits in these particulars. It is to be observed that this scheme in Virginia is combined with a license system; as under the law the dealer is first required to obtain a license from a "county or corporation court," after satisfying such court that he is "a fit person" (whatever that may mean) to have such privilege, and filing a bond to observe the law, and is to pay therefor a fee of from \$50 to \$100. As a license law it presents no novel features and calls for no remark. As a tax law it seems to be purely a revenue measure, and of no regulative value. As according to the usages of trade the amount of the tax, and in case of fractions something more, will be added to the price of the commodity, the burden will fall exclusively upon the consumer. In more ways than one it would seem that the dealer may be a gainer. I assume that the added price is not enough to affect the consumption. Such does not seem to be its design. The increment for each drink is so slight that it will hardly deter the poorest, while in the aggregate of a year's consumption it may perceptibly diminish the vanishing comforts or necessities of the toper's home.

There is something horribly dramatic in this immediate con-

tribution to the public treasury from bar-room drinking. The slang phrase of an invitation to drink in Virginia to-day is, "Will you increase the revenue?" It recalls the lines of Cowper :

" Th' Excise is fattened with the rich result  
 Of all this riot ; and ten thousand casks,  
 Forever dribbling out their base contents,  
 Touched by the Midas finger of the state,  
 Bleed gold for Parliament to vote away.  
 Drink, and be mad then ; 'tis your country bids !  
 Gloriously drunk—obey the important call ;  
 Her cause demands the assistance of your throats.  
 Ye all can swallow, and she asks no more."

—*The Winter Evening*, v. 504-512.

After careful reflection upon this new scheme of taxation we are compelled from weighty considerations to pronounce against it.

In a dangerous disease to trifle with *placebos*, or even with feeble palliatives, is criminal negligence. "*Intemperance*," says Governor Bagley, in the very Message to which we have alluded, "*is the danger of the hour* ;" and he speaks of the liquor-shops as ("places where humanity is made barter of, and dollars traded for degradation.") And is a great commonwealth to say of such a traffic that it can neither prohibit, restrain, nor regulate it, and can only make it pay tribute? The problem of law as applied to the liquor traffic stands before us for solution. It presses for a wise and courageous treatment. The Michigan scheme is a hopeless confession of despair. It relinquishes all control of the business except to crush out those too poor to pay for the privilege of making wrecks of manhood. This is to abnegate one of the highest functions and one of the most solemn duties of the state.

But the evil of the law is positive as well as negative. It not only leaves undone what law ought to do, but it does what law ought not to do.

We assume that the ordinary liquor traffic is morally wrong. The state ought not to assume its moral indifference. It ought not to sanction it. To do so is to educate downward the public mind and conscience. It may fairly be conceded that a license is a far more direct and unequivocal endorsement of the

traffic and the trafficker than a tax. Indeed, as shown by Judge Cooley in the case above cited, it is not correct reasoning to infer that the state approbates what it taxes. "Taxes are not favors; they are burdens;" and the learned Judge pertinently adds, "It may be supposed that some idea of special protection is involved when a business is taxed, taxation and protection being reciprocal; . . . but the maxim of reciprocity in taxation has no such meaning. No government undertakes to tax all it protects. . . . It is his liability to taxation at the will of the government that entitles him to protection, and not the circumstance of his being actually taxed." From which it follows that his claim upon the state for protection is not enlarged or affected by the exercise of this right. The police power of the state is not curtailed, and the state is not bound to protect what is injurious to it. This may be satisfactory to the logical understanding; in the forum of the courts it is conclusive; but still the vital question for us is, How does such legislation strike the popular mind? The objection to it on the part of those opposed to the liquor traffic may be, as the court say, "sentimental;" but that does not dispose of it. He is a very poor practical statesman who does not take into account the sentiments of a people, especially if they take the form of moral instincts. As factors which enter into the formation of opinion and the guidance of conduct they are not less important than the reason and the judgment. If to the common mind among both the supporters and opponents of the liquor traffic it seems that the government by taxation places the trade on the footing of a legitimate business, this lulls the conscience of the one and blunts the attacks of the other. And I apprehend there is no doubt that such is the practical estimate made of the tendency of such a law. Lord Chesterfield, a thorough man of the world as he was, broke forth in a memorable debate in the House of Lords during the last century, in a strain of indignation as natural as it was forcible when he exclaimed: "Luxury, my lords, is to be taxed, but vice prohibited, let the difficulty in the law be what it will. Would you lay a tax upon a breach of the ten commandments? Would not such a tax be wicked and scandalous? Would it not imply an indulgence to

all those who could pay the tax? Vice, my lords, is not properly to be taxed, but suppressed."

A simple test seems to us conclusive as to the instinctive moral judgment of men in this matter. Let us take an admitted vicious pursuit, which we have not been accustomed to see dealt with by the law except in the way of suppression. Suppose it were proposed to collect a tax upon brothel-keepers. Would it not be a public scandal? Even the National Government, in the time of the war, when it "sought out every invention" to create taxes, did not venture on this.

It is undoubtedly true that these considerations will affect different minds unequally. To some the moral sentiments are among the most vital of forces, and to pervert or deaden these is at once one of the saddest and one of the most disastrous results. To others the world seems moved by self-interest, and to enlist that apparently on the wrong side is the greatest of calamities. Those of us who are not inclined to this extreme view of human selfishness as the absolutely determining power in human affairs, are yet fully impressed with the immense power for evil which results from the alliance of the love of money with any of the baser passions. And here we come upon a most formidable objection to the system of legislation under consideration; it tends to create in the state an apparent pecuniary interest in the maintenance of the dramshop.

The history of England has repeatedly shown how dangerous it is to ally the national interest with gigantic systems of wrong. The peace of Utrecht in 1713, which, as Mr. Lecky observes, by securing to England the monopoly of the slave-trade to the Spanish colonies made England "the great slave-trader of the world," was, so far as that clause was concerned, received in that country with such universal favor, that the same historian says "it does not yet appear to have occurred to any class that a national policy which made it its main object to encourage the kidnapping of tens of thousands of negroes and their consignment to the most miserable slavery" was "inconsistent with the spirit of the Christian religion." It is always easier to see our neighbors' wickedness than it is our own; and so we call attention again to the horrors of that opium traffic which England forced

upon China at the cannon's mouth for the sake of the immense revenue poured in to her Indian treasury ; and at this day, despite Indian famines, the government for this sake grows " upon millions of acres of what ought to be food-producing land in that country the opium to send to China." Said Sir Walter C. Trevelyan lately : " And to the shame of England be it spoken, this infamous opium trade is a monopoly of our government ! We grieve to think that the Empress of India can have been advised to sanction such an iniquity." Here and there a brave man like Canon Wilberforce responds that he " cannot help remembering those terrible words that look you in the face out of the book of the prophet Jeremiah like a glowing coal, ' They shall be ashamed of their revenues, because of the fierce anger of the Lord.' " But the leaders of opinion are silent. How horrible seems this deadening of conscience in a Christian nation !

The liquor traffic itself presents in England an appalling bribe against any effective legislation for its diminution. The returns of revenue for the United Kingdom for the year 1877 show that the traffic contributed £7,478,156 from the customs, and £25,969,126 from the excise ; making a total of £33,447,282, or over one hundred and sixty millions of dollars, and being over a third of the whole colossal revenue of the nation. A reform that threatens this must stir the very depths of the human heart and lay hold on the heights of religious motives, and then call for heroic effort. Not only the reformers, but intelligent journalists and students of public affairs, have come to recognize the gravity of the alliance between the Publicans and the Chancellor of the Exchequer.<sup>1</sup>

In the United States the distribution of taxation between the Federal and State governments is such that the revenue from the liquor trade does not so aggregate itself as to assume

<sup>1</sup> As a curious illustration of the chronic disposition of all financiers to look at the consumption of liquors from their narrow standpoint, we quote this passage from Mr. Lecky : " In a very valuable paper on ' The State of the Revenue of Scotland,' drawn up about 1742, Duncan Forbes laments bitterly the decline of the duty on beer and ale. ' The cause of the mischief we complain of,' he says, is ' evidently the excessive use of tea.' " Had he lived, he would have been soothed by the faithful persistence of the Scotch in paying duties and taxes upon whisky.

such controlling influence over our statesmen. And it is also to be remarked that as to the internal liquor traffic, while the Federal Government derives a large revenue from its taxation (in 1876 over sixty-five millions of dollars), yet under the theory and practice of our government the regulation of that traffic, even to its entire prohibition, is reserved to the several States. It is not unlikely that the contemplation of the enormous sums received since the war from this national taxation has awakened the States to the capacity for revenue which the traffic affords. And if the magnitude of a national tax impresses the imagination more, on the other hand, when it is distributed and brought home to the people as a source of State, or perchance of local revenue, it affects more apparently the individual interest of the citizen.

Men are not always willing to avow the baser motives which control their policy; nay, they are not always conscious of them. But occasionally some one whose frankness is greater, or his sense of shame less than that of ordinary men, is ready to avow the latent feelings of his fellows. Thus, in the late Constitutional Convention of Ohio, we find Mr. Bishop, of Cincinnati, boldly saying that while he considers "the misery it (the liquor traffic) entails on the one hand, and the part it plays in national finances on the other," he is "not ready to vote to sacrifice and destroy all the wealth and influence which are at this time invested in this branch of commerce;" and he adds that the traffic is "two or three times as great in amount as the pork trade in Cincinnati."

We should underrate the quality of the hearts and heads of the readers of this Review were we to suppose that they would deliberately weigh the "wealth invested" in the liquor traffic against "the misery it entails." They are absolutely incommensurable; for the one is material, the other spiritual; the one is temporal, the other eternal. But if we eliminate what is saddest of the misery, and leave only the residuum of pecuniary loss, it fearfully overshadows all possible revenue to the state or nation. For such a revenue is based upon a vastly greater aggregate of wasteful consumption, and of consumption which not only entails upon the public the support of pauperism and the punishment of crime and the cost of sickness and acci-

dents, but strikes at the very source of national wealth by diminishing productive industry and impairing the power of production itself. A traffic that makes bad citizens and poor laborers can offer no financial compensations to the state worth a wise man's consideration.

We are compelled, then, to the conclusion, that the taxation of the liquor traffic offers no effective regulation of it ; that if held out as a measure of reform it is delusive, and stands in the way of better legislation ; and that in itself it has the double vice of being opposed to the better moral instincts, and of being operative as a bribe to pervert the public conscience.

ROBERT C. PITMAN.

## SCIENCE AND A FUTURE STATE.

**B**ROADLY speaking, there are two ways of looking at things. We may measure that which is without by a standard from within, or that which is within by a standard from without. The old schoolmen adopted the first method when they insisted upon the perfect circularity of the planetary motions and the immaculate perfection of the sun. Their failure has already become a story of the past. But at the present moment an opposite school of thought have gained ascendency, and these insist upon regarding man as altogether the product of the visible world around him.

Their procrustean method of measurement has been applied so rigidly, and sometimes so unfeelingly, as to provoke a violent opposition from the inmost depths of our nature. And yet there is an amount of reasonableness in both these ways of setting to work.

The truth would seem to be that if we had on the one hand a complete knowledge of our own natures, we could rise to a comprehensive grasp of the cosmos ; or if we had, on the other, a complete view of the cosmos, we could by this means obtain a thorough knowledge of ourselves. But in either case we must always start from something within ourselves. The justifiable satisfaction which we now feel when we contemplate all that science has already achieved arises from the conviction that there is a profound correspondence between our scientific instincts and the course of outward things, so profound and so intimate that our intellectual nature is never put to permanent confusion. Thus the true man of science, whilst he regards the past with satisfaction, contemplates the future with unbounded

hope—he sees before him an interminable vista, along which he delights to travel ; “ forgetting the things which are behind, he is continually pressing forward to those which are before.”

Now let us ask ourselves why it was that the old schoolmen made such a profound mistake. We think that the blame for their failure has been attributed in too large a proportion to the Church of those days, and in too small a proportion to the mental peculiarities of the middle ages, which were pervaded with the spirit of literature rather than with that of scientific thought. The intellectual weapon employed was not altogether intellectual. The prevalent school of thought, actuated rather by moral and religious than by strictly intellectual views, had forged something which was not a weapon. It was of no use in the investigation of nature, when nature came to be investigated. Nevertheless the schoolmen did not give way without a struggle, they denied the reality of the perplexity introduced when their scheme was tested by observation. They continued for some time to assert the truth of their views, and to question the accuracy of the observations which appeared to contradict them—at length, however, they were compelled to yield. Let us now review in a similar manner the procedure of the extreme school of the present day. A victory for science has undoubtedly been gained ; we can now look at things from a comprehensive stand-point, and are able to realize the underlying unity of the cosmos. But man himself forms part of this wonderful order, and therefore it is deemed possible to explain scientifically, and, as it were, from without, the origin of man’s moral and spiritual nature. The attempt is made ; but the explanation does not prove satisfactory to a large body of men, who continue to assert that the adoption of the proposed scheme would lead to permanent perplexity in the moral and spiritual world. Now there are two ways of criticising such a scheme.

Inasmuch as it takes its rise upon the basis of scientific speculation we may criticise it intellectually, and see whether it be thoroughly consistent with itself, or whether some vital point may not in reality have been overlooked.

Or we may attempt to show that if introduced it would inevitably lead to permanent moral confusion, and if we succeed

in this we shall in reality have sufficiently condemned it ; for just as the intellect is bound to reject any scheme that would permanently perplex it, so is the moral and spiritual nature of man bound to reject any that will inevitably lead to moral and spiritual confusion. To speak plainly, we may attack the materialistic scheme in two ways : we may either challenge the validity of its leading scientific argument, directed mainly against the possibility of a future state of existence, or we may attempt to prove that the denial of such a state will produce irretrievable moral perplexity. The first of these will be the course adopted by the man of science, the second will commend itself to the moral philosopher. Desiring here to confine ourselves to the first of these two methods, we cannot, however, refrain from making one remark. Confusion is not an element that any body of thinkers are willing to encounter, and the extreme school, who have been the aggressors on this occasion, are naturally anxious to prove (just as the old schoolmen attempted to do) that the disturbance is, after all, only apparent, and that a nobler and higher system of moral and social order will ultimately be established on a sound philosophical basis. They decline to receive the outcry of the followers of religion as a true evidence of confusion. Nevertheless, the disturbance caused is real enough and honest enough, for we have the curious fact of the rise of a school of pessimists amongst the scientific ranks themselves ; that is to say, of men who are at once bold enough to carry out their principles, and candid enough to admit that as a logical consequence intelligent existence is a mistake.

Let us now endeavor to ascertain the true verdict of science on the question raised by this extreme school of thought. We see many groups of things in the world around us. There are things in motion and things at rest, things colored and things without color, things sounding and things silent, things hard and things soft, things living and things dead. Now, without doubt, this last group will impress us most profoundly, for in things living we recognize a likeness to ourselves, while from the fate of things dead we perhaps think we may predict our own. And from a surface view the tale here told by nature is certainly not a pleasing one. For there seems to be a general

facility of transmutation, in virtue of which external things go about from group to group, so that what is bright to-day may be dark to-night and bright again to-morrow, or what is in motion now may be afterwards in repose and anon in motion once more. But there is one great exception to this law of convertibility, and that in the very group with which we are most intimately concerned ; for a thing which is alive to-day may be dead to-morrow, but it will not live again.

If, however, we continue to reflect upon the subject, we shall see that this physical law of life, important as it is, does not yet furnish man with a reply to that question which most concerns him. For we want to know whether the death of the individual be the end of his conscious existence not merely here, and under earthly conditions, but elsewhere, and under all conceivable conditions. Now, can a study of nature enable us to solve this problem ? There are three possible replies which science, so questioned, may be imagined to give to our demand. In the first place, it is at least conceivable that she may be in a position to offer a definite solution of the question, whether positive or negative ; or, secondly, she may affirm her absolute incompetence to throw any light whatever upon the subject ; or, thirdly, while unable to afford a complete solution, she may yet be able to offer some hint that will support the evidence derived from other quarters. We need hardly say that in pursuing such an inquiry from the scientific side, we must divest ourselves of all strictly personal considerations. The craving of the individual for continued existence (as well as the opposite craving which some assert they possess) is, after all, a personal equation here out of place, and which we must hand over to the moral philosopher to be weighed in other balances than ours.

But, nevertheless, this separation between the moral and scientific aspects of the question is, after all, artificial—it is one which convenience dictates rather than one which true philosophy requires. Indeed, we are never able to get rid of the moral element even in those investigations most legitimately scientific. For no man is able to verify by himself the truth of statements which he is yet willing to accept on the testimony of others. Thus the moral element of trustworthiness mingles,

and must continue to mingle, with all our intellectual achievements. In astronomy, for instance, certain phenomena may have been observed by one generation which will not be repeated to the next—the astronomer must therefore estimate in his mind the amount of credit or trustworthiness to be attached to the observations of his predecessors before he can arrive at any conclusion. One or two concrete examples may perhaps serve to bring out more clearly the peculiarities of this law of scientific testimony.

A trustworthy friend has told us that during a thunder-storm he observed an unmistakable instance of globular lightning. We cannot explain this phenomenon by what we know of electricity, but are yet willing to own that our knowledge of the subject is incomplete. Now, if under these circumstances another independent and trustworthy observer should inform us that he too saw the same phenomenon at the same time, and nearly at the same place, our suspense would be removed, and something like a scientific certainty would take its place. The evidence in favor of the existence of globular lightning would be unquestionably good; while it would also be the best that could from the nature of the case be brought into court. Let us now take a very different case, and imagine that another friend (quite trustworthy) should suddenly inform us that on one occasion he had seen the sun remain above the horizon for a couple of days in these latitudes, or that he was able at will to create gold out of nothing, or that he knew a friend who could read the secrets of any cabinet at any distance. We should without hesitation conclude from the first two statements that the physical health of our friend must be looked to, while from the last, standing by itself, we should imagine that he had been imposed upon by others. In neither case should we believe for one moment in the reality of the occurrence, for to do so would introduce an element of permanent intellectual confusion.

We thus begin to see what constitutes the scientific law of evidence; it is not that the man of science objects to believe in the occurrence of strange and unfrequent phenomena, but that he believes these to occur only in such a way as not to put the intellectual faculties to permanent perplexity.

There can be no doubt that if the day were occasionally twice as long as usual, or if a man could create gold at will out of nothing, or if another could read secrets at will, human business would be permanently interrupted, and the human intellect put to permanent confusion. These examples may perhaps serve to bring before our readers the exact nature of this most fundamental and deeply seated of all our scientific convictions, and may likewise be useful in another way. It will be noticed that it is only in the first case quoted by us that we erect a mental tribunal; in the second, we have no hesitation in pronouncing at once. Now, hesitation implies ignorance, and thus represents not a permanent but only a transitory phase in the progress of inquiry. Had our knowledge of electricity been more complete we should not have had to sit in judgment at all, and we may look forward to the time when this result will be attained. If we apply this principle to the main subject of discussion, it must surely be acknowledged that the present perplexity represents only a passing phase of thought. Just at this moment there are doubtless not a few who imagine they have an intellectual reason for questioning the possibility of a future state, while on the other hand they are convinced of the moral necessity for such a belief. They thus exist in a state of suspense, being swayed first to one side and then to another in their conclusions.

Now it is our conviction, as well as that of many others, that the antagonism which these men fancy does not really exist, but that the stage for such uncertainty has already been passed, so that this balancing of conclusions is absolutely uncalled for. On the contrary, we maintain that a sufficiently wide discussion from the scientific side will now produce results that will commend themselves to the moral philosopher. Before commencing this discussion, it may be desirable briefly to review the position which the materialistic school have taken up.

With regard to the objective side of the universe it is maintained that we have no knowledge of any thing else than molecules and ether, the former being likened to the bricks out of which the physical structure is built, while the ether forms the cement by virtue of which these bricks are bound together.

The energy or working power of this universe is likewise

supposed to be constant, none coming into it, and none going out. This energy is, however, capable of going backwards and forwards between the molecules and the ether; but on the whole there is more going from the molecules to the ether than from the ether to the molecules. A day will therefore arrive when our solar system will have parted with all its energy. In the next place, it is maintained that there is a very intimate connection between the feelings and thoughts of a being like man and the brain-changes which form the invariable concomitants of these feelings and thoughts. Therefore, whenever we remember a past event, this act of memory involves a change in our brain, in which such memory is, in a physical sense, stored up. Thus Professor Huxley tells us, "It is not to be doubted that those motions which give rise to sensation leave on the brain changes of its substance, which answer to what Haller called '*vestigia rerum*,' and to what that great thinker, David Hartley, termed '*Vibratiuncles*.' The sensation which has passed away leaves behind molecules of the brain competent to its reproduction—'sensigous' molecules, so to speak—which constitute the physical foundation of memory."

Now, presuming that it is impossible to conceive of a finite unconditional intelligence, that is to say, of a pure finite spirit, it would seem to follow that one of the requisites of continued existence must be the possession of some organ of memory, by means of which the present is connected with the past experience of the living being, and that when death destroys this organ of memory it puts an end to the existence of the individual. It may perhaps be alleged that there exists in the ether traces of every action which has occurred in the brain before death, and therefore something analogous to a physical memory; but to this it is replied that life is absolutely impossible in the ether as we know it. In fine, it is asserted that the destruction of the brain involves that of the memory, and is therefore the end of the individual's existence. Now, theologians have, for the most part, replied to this by reminding us that all things are possible with God, and hence that a new form may be created by him to replace that which is destroyed by death. The counter-reply is that such would be equivalent to the creation of an absolutely new universe, having no per-

ceivable physical relation to the present, and would therefore introduce an element of permanent intellectual confusion in order to remedy apparent moral confusion.

Besides, it is said, what evidence can we have of the existence of such a state? and if the historical miracles of Christianity be cited, it is replied that to believe in these would introduce the very same element of confusion.

The new school of thought conceive themselves, therefore, driven to discredit the reality of these occurrences, and to look upon them as legends or impostures, however difficult such an hypothesis may otherwise be.

The theologian replies to this by bringing forward the character and claims of Christ, and arguing that the very conception, and far more the historical reality, of this character and these claims imply a moral miracle so stupendous and unaccountable, on natural grounds alone, as to render insignificant all discussion of those physical occurrences which, taken by themselves, might prove perplexing. Here, then, we have all the elements of a controversy that has at first sight the appearance of being interminable.

The scientific school take their stand upon the basis of the intellect, and assert that the claims of Christianity and the doctrine of a future state would inevitably lead to intellectual confusion; while the theologians, on their side, assert that the doctrines of the new school of scientific thought would lead to moral and spiritual confusion. And each party keeps very much to its own ground. Occasionally the man of science tries to build morals on a new foundation, but not with much success; while the theologian, on his side, tries too often to discredit the conclusions of the scientific school in a way that is equally unconvincing. In fine, we have here nothing like a serious engagement, but rather a never-ending controversy, very much resembling (and we trust that both parties will excuse the comparison) that of two dogs that stand facing one another, and barking furiously each from the limit of his chain. Untie their chains and they may perhaps fight at first, but will presently end by being very good friends. It is virtually a task of this nature which Professor Tait of Edinburgh and the author of this essay have endeavored to aid in accom-

plishing, with what success remains to be seen. When we examine the extreme scientific position, we perceive it to be founded on the assertion that we are not brought intellectually into contact with any thing else than molecules and ether; that these, in fact, form the whole substance of the universe, and that besides them there is nothing else. We may here allow that if it could be shown that molecules and ether constitute the whole of things, and if life be impossible in the ether, the argument against immortality would, *from the scientific side*, be very strong indeed. But if it can be shown that these two entities do not constitute the sum total of the universe, but only a small portion of it, there will be of course room for other possibilities.

Now we think that this can be done—we believe it can be shown that there must be a vast unseen universe, and that, as far as we can judge from scientific analogy, this vast unseen is replete with intelligence and spiritual power. The extreme scientific school have therefore committed a very grave error in tying themselves down to molecules and ether.

On the other hand, a larger class of theologians have (with notable exceptions, however) tied themselves down to an equally untenable hypothesis regarding miracles, and we may here be allowed to quote the words which two recent writers use on this subject:<sup>1</sup> "It was not exactly asserted that miracles were arbitrary events, or that they were not the results of purpose, but only that the purpose of which they were the accomplishment could not be realized without some physical break. In fine, with the view of removing spiritual confusion, intellectual confusion was introduced, as being the lesser evil of the two. Thus, if he submits to be guided by such interpreters, each intelligent being will forever continue to be baffled in any attempt to explain these phenomena, because they are said to have no physical relation to any thing that went before or that followed after. In fine, they are made to form a universe within a universe, a portion cut off by an unsurmountable barrier from the domain of scientific inquiry."

So much for these writers. It will thus be perceived that a

<sup>1</sup> "Unseen Universe," page 89.

school of theologians have unduly fettered themselves, not by asserting the occurrence of miracles, but rather by supplementing the assertion by an unfortunate hypothesis of their own. We have now tried to bring before the reader the positions of the rival hosts. On a future occasion we shall endeavor to show how a reconciliation may in our judgment be brought about.

BALFOUR STEWART.

## JOHN STUART MILL AND THE DESTRUCTION OF THEISM.

TWO intimately related movements of religious or anti-religious thought have been going forward for a quarter of a century and more in the English world—one having as its aim the destruction of theism, and the other the construction of an imposing and comprehensive system of anti-theism, or atheism. In the former, John Stuart Mill has been the leading spirit ; in the latter, Herbert Spencer ; and to these two men, more than to all others combined, the present atheistic trend of English thought in the more pretentious circles is, in the opinion of the best judges, to be ascribed. The fact that they have done their work in the name of science and philosophy has doubtless added very largely to their influence.

Five years ago Mr. Mill ruled with absolute despotism a large proportion of the so-called educated and thinking men in Great Britain. Indiscriminate laudation of his logic, his philosophy, his candor, his high motives, etc., was the order of the day to such an extent that it was safer to find fault with the sun itself than with this great philosophic light. His agnostic conclusions were widely accepted without question ; his flings at theism were voted worth more than solid arguments in favor of it ; his reticence in the statement of his atheistic views, though it had alienated Comte, had made such an impression of reserve force upon his worshippers, that faith in Mill seemed with them to have already superseded faith in God. But English thought, so far as Mr. Mill is its subject, has undergone a most remarkable change since his death. It is interesting to trace the growing sense of fear on the one side and of freedom on the other.

Immediately after his death, one of his most enthusiastic admirers, Miss Edith Simcox, a lady who holds a prominent place in the present English rationalistic literature for reasons similar to those which have given Mr. Mill his influence came before the public with what she was pleased to style

"an attempt to show not only that Mr. Mill's influence on the ordinary thought of the day is still undiminished, but also that it would indeed be a national calamity for that influence to become either weakened, warped, or forgotten."

After the publication of the *Autobiography*, Lord Blachford, an able writer of an opposite school, ventured to express his opinion with some degree of confidence, as follows :

"If the intellect of our universities (as I understand to be the case) is being moulded into accordance with this philosophy, it appears to me that we may expect some startling conclusions from the rising generation. Whether these conclusions will be long maintained, either by the thinking or by the unthinking part of the world outside, is another matter."

Upon the publication of the *Three Essays*, the *Pall Mall Budget* declared that Mill's followers in England received them "with mingled feelings of surprise, disappointment, and of something closely bordering on irritation."

The truth was evidently beginning to dawn on the minds of some of the "thinkers" and "philosophers." Three years more have now passed, and the growing sense of light and freedom has so increased that Professor W. Stanley Jevons, of University College, London, the man perhaps best fitted to dissect Mr. Mill and his logic, has risen to protest against the despotism which has compelled him for twenty years to use Mill's works as text-books in his college instruction. So intricate is the sophistry of these works, that ten years of study passed before he "began to detect their fundamental unsoundness." But during the last ten years the conviction has been growing upon his mind, "that Mill's authority is doing immense injury to the cause of philosophy and good intellectual training in England." Professor Jevons, in the opening essay of a series in review of special points in Mill's logic and philosophy, writes :

"But for my part, I will no longer consent to live silently under the incubus of bad logic and bad philosophy which Mill's works have laid upon us. On almost every subject of social importance—religion, morals, political phi-

losophy, political economy, metaphysics, logic—he has expressed unhesitating opinions, and his sayings are quoted by his admirers as if they were the oracles of a perfectly wise and logical mind. Nobody questions, or at least ought to question, the force of Mill's style, the persuasive power of his words, the candor of his discussions, and the perfect goodness of his motives. If to all his other great qualities had been happily added logical accurateness, his writings would indeed have been a source of light for generations to come. But in one way or another Mill's intellect was wrecked. The cause of injury may have been the ruthless training imposed upon him in tender years ; it may have been Mill's own life-long attempt to reconcile a false empirical philosophy with conflicting truth. But, however it arose, Mill's mind was essentially illogical."

These plain words clearly indicate a radical revolution in the mind of Professor Jevons. That he does not at all *underestimate* Mr. Mill's logical acumen will be made to appear from a careful examination of that logician's criticism and supposed refutation of the theistic argument for a First Cause, found in the essay on *Theism*, one of his latest productions, professedly written in the name of exact science. It is far from clear, however, that Professor Jevons does not *overestimate* Mr. Mill's "candor" as well as the "goodness of his motives." \*

Mill's argument is undoubtedly one of the most dangerous ever constructed in opposition to Theism. There are those of his own party who are inclined to underestimate its strength, but until they furnish a stronger it may fairly be considered as the best that can be done from the destructive side. Moreover, it cannot justly be claimed that it omits any considerations of essential importance on the anti-theistic side. It even takes in, by anticipation, the latest conclusion of Professor Huxley and Tyndall, that man is a mere *automaton*, a machine run by necessary forces, so that the last vestige of the old anthropomorphic basis for argument to a First Cause is apparently swept away.

But the danger from the argument does not lie in the strength so much as in the marvellous combination of intricate sophistry and utter confusion of thought, with an extraordinary show of candor and fairness, and a tone of supreme confidence such as is ordinarily begotten only by a certain and infallible grasp of truth. It is this element in Mill's writings that enabled them for ten years to dazzle so clear an eye as that of the distinguished Professor in University College, and it is this that

enables them to pass for little less than philosophic inspiration with multitudes of less discerning minds. As soon as this feature can be clearly exposed, Mill's works will cease to be dangerous.

Passing over the rationalistic platitudes of the Introduction, concerning the present changed moral and intellectual attitude of the opponents of Christianity towards that effete system, and the irrepressible conflict between science and religion, there is one thing in which all sound theists will agree with the great logician :

"The most important quality of an opinion on any momentous subject is its truth or falsity, which to us resolves itself into the sufficiency of the evidence on which it rests." (*Three Essays*, p. 128.)

By this standard every fair mind would have Christian theism tried. There is, by Mill's own admission, one form of theism which is consistent with science, "the conception of a God governing the world by invariable laws" (p. 135). Mr. Mill takes the proofs commonly adduced of this view, and applies his scientific standard to them. The results arrived at may be briefly stated.

In Part I. of the *Essay*, the arguments are isolated from one another and considered in detail. The argument from the universe to a First Cause is first tested by the standard of experience and found wholly wanting. That from the General Consent of Mankind is then taken up, misstated, and found equally worthless. That from Consciousness, including the metaphysical argument of Descartes and an emasculated form of the moral argument, is declared to have no positive value. The Design argument, considered next in order, is weakly stated, and pronounced able to give no more than a slight probability of creation, which would be greatly attenuated if the theory of Evolution should be shown to be true. In the next three Parts are considered the "sort of a Deity to which these weak evidences of design point, the absence of all evidence for a future life, and the worthlessness of the evidences proposed to establish a revelation. Part V. contains the "General Result," the sum of which is :

"The rational attitude of a thinking mind towards the supernatural,

whether in natural or revealed religion, is that of skepticism as distinguished from belief on the one hand, and from atheism on the other."

The God of Creation and Providence is practically dismissed from the universe, and the entire domain of the supernatural relegated to a region of mere imagination, and confined to the indulgence of hope rather than the cherishing of belief. Such hope in such region of imagination may philosophically be cherished because of its beneficent effects. The only "real, though purely human, religion" is that "which sometimes calls itself the Religion of Humanity and sometimes that of Duty." This is undoubtedly destined, with or without supernatural sanction, to be the religion of the Future, and is to rest "its due ascendency over the human mind" upon "supernatural hopes, in the degree and kind in which what I have called rational skepticism does not refuse to sanction them."

Now if Mill has really given us in his arguments the conclusions of *exact science*, and these compel us to part either with the truth or with a God in whom we irrationally believe, however terrible the alternative may appear, it ought to be known in order that we may let go our superstition and embrace the truth. If, on the contrary, he has given us inexact and worthless dogmatism in the name of science, then that ought to be known, in order that it may be repudiated with all the emphasis of a righteous moral indignation. If it be seen that Mill, in its very statement, deliberately prejudices the argument for theism, or that he blinks or falsifies the facts at the basis of his so-called inductions, or that he ignores or perverts the truths at the basis of his professed deductions, or that he is constantly making unwarranted assumptions, or that he habitually uses obscure, ambiguous, and improper terms to represent his capital conceptions, or that he is either an adept or a silly blunderer in illegitimate inference, any of these things must so far attenuate the force of his argument. If, as can be shown, his so-called scientific argument is absolutely made up of them, then it ought to be rejected with an intensity of moral indignation such as has scarcely ever been visited upon any other infidel production.

The first count is against the general method of this man of eminent candor. It is the method of the sophist and not of

the fair reasoner. The evidence of theism, whether natural or revealed, is *cumulative*, or, better than that, *converging*. The doctrine does not rest on a single line of proof, but on several converging lines. This has been admirably shown by Canon Barry in his recently published "Boyle Lectures."<sup>1</sup> The universal consent of mankind, the principle of causation, the order of the universe, the intuition of the infinite, the voice of conscience, and the yearnings of the affections, all converge towards one common centre, and the strength of the argument lies in this. When we find this to be the case with the six or more distinct lines of proof, we are able to conclude with something approaching to certainty that this centre is a personal God. Now Mill conveniently and entirely ignores this essential feature in the argument, isolates the various proofs, and disposes of each in his summary way, scarcely, if at all, alluding to its connection with the others. It is an easy matter to cut up a hostile force in detail, division by division, even though that force in solid column would be absolutely overwhelming. This is Mill's general method. Or, rather, it is the same method as that of proving that a table cannot stand upon four or six legs because, forsooth, it is found that it cannot stand on any one of the legs alone! We ask Mill's admirers, Was the candid logician aware of this? Or, was he not? They are welcome to either horn of the dilemma. If they choose the first, what becomes of his *candor*? If the second, what of his *logical acumen*?

And in his conclusion from the review of the entire argument, that "the rational attitude of a thinking mind towards the supernatural is that of skepticism," Mill goes equally astray. Logically considered, that is a most *irrational* attitude. The case is one of those calling for practical decision—one in which, as Dr. Newman has shown in the *Grammar of Assent*, it is *our duty to decide* one way or the other:

"Where only two ways of alternative action are possible, the practical decision may be the same, whether on demonstrative or probable evidence, whether on low or high probability. The difference will lie in the amount of enthusiasm we can throw into our action and the amount of sacrifice we are ready to make for it."

<sup>1</sup> "Boyle Lectures, 1876. What is Natural Theology? An Attempt to Estimate the Cumulative Evidence of Many Witnesses to God."

Now Mill admits, that even after the application of his utterly illogical method to the examination of the proofs of Theism, "there is evidence . . . amounting . . . to one of the lower degrees of probability," which points to the creation of the present order of things by an intelligent mind (pp. 242-3). If that be so, what is one's duty? The case is a practical one involving eternal interests. In any such case involving even the most unimportant interests of his daily life, this same skeptic would, as Bishop Butler has shown, unhesitatingly act upon just such probabilities as this. In fact, the great successes of life are often attained by action based on just such data. In a practical case, like that under consideration, involving interests beyond possible estimate, conscience utters its imperative with tremendous emphasis. The "rational attitude" is undoubtedly that presented by Chalmers, in his *Natural Theology*, that the bare imagination there *may be* a God brings along with it an instant sense of duty to inquire if there *really be* a God; and the slightest whisper from that God, telling of his existence as a fact, places every one of his rational creatures under the most solemn obligation to seek after and find him.

Mill's general method in the entire conduct of his so-called scientific test of the proofs of theism is, therefore, entirely illogical and unfair, and his practical conclusion supremely irrational.

#### MILL *versus* A FIRST CAUSE.

Mr. Mill's logical method in the parts of his argument will be illustrated by an examination of the details of his attempted scientific refutation of the theistic argument for a First Cause. There are two stages in his criticism—in the first of which he attempts to show that experience teaches that the material universe needs no First Cause except blind Force; in the second, that the spiritual universe needs no other cause. By this appeal to experience he claims to have annihilated the argument from the universe for an intelligent First Cause, the God of the Theist. If his argumentation be valid, he has most certainly accounted for every thing in the universe, which has henceforth no

more need for a divine First Cause than the man in the moon has for an atmosphere to breathe. But is it valid?

*Mill's opening Statement.*—“The argument for a First Cause admits of being, and is presented as a conclusion from the whole of human experience. Every thing that we know (it is argued) had a cause and owed its existence to that cause. How then can it be but that the world, which is but a name for the aggregate of all that we know, has a cause to which it is indebted for its existence?”—*Three Essays*, p. 142.

By whom is it so presented? By Mr. Mill. How many sound advocates of theism would acknowledge that the argument on which they rest their case admits of being presented as a mere conclusion from experience in Mill's sense of that word? Not one. In other words, the candid and logical Mr. Mill starts out with a radical misstatement of the argument, which renders it worthless. Just how worthless will appear from considering the character and grounds of experience, as Mill understands and uses the term.

Mill has three senses in which he uses “experience.” In the narrow sense it includes only what has come under one's own observation by the senses. “Human experience” is then confined to what has come under the observation of the race in this way. In a wider sense, it adds to this narrower experience all inductions or generalizations from it, while excluding all intuitive principles or necessary laws of thought. When the great logician plays the complete rôle of the sophist, he covertly includes under the term “experience,” as among the inductions from experience, any or all of the absurd and unverifiable speculations of the so-called scientists and philosophers of his favorite school. Now in whatever sense he may use “experience” in the present argument, the position is one from which no sound, not to say sane, theist would think of arguing to a First Cause. The theist bases his argument on the principle of causality—in other words, on a necessity of all human thinking, by virtue of which a man, when he sees something occur or begin to be, cannot help judging that it must have had a cause. He shows that this principle of causality is an original, self-evident, necessary, and catholic principle, without the presupposition of which there can be no warrant for believing either that all past events have had causes, or that any future events will have

causes. In short, no valid induction from experience is possible without assuming this as the starting-point. His fundamental position is, (' Every event *must have a cause*,') and not as Mill puts it, " Every thing that we know had a cause."

The logical value of the experiential basis for theism proposed by this great destroyer, is best shown by the success of his own elaborate attempt to construct an inductive theory without the principle of causality.<sup>1</sup> He puts the matter thus: If it be asked, What ground have we, from the fact that in ten thousand cases events have had causes, for the expectation that the next event will have a cause? the answer is that our warrant is found in "a universal fact," which he expresses in the proposition that "the course of nature is uniform." It is obvious even to himself, that in this first step he starts from a very limited premise and reaches an absolutely universal conclusion. He is, therefore, forced to attempt to answer the further question, How (in the absence of the intuitive principle of causality) are we to know that the course of nature has been or will be thus uniform in all that part of the *universal* range which lies beyond our experience? He answers that this is an induction of the largest kind, a generalization from an experience almost limitless. Barely calling attention to the patent fact, that no such almost limitless experience is either actual or possible, and that even if it were so it would not help Mr. Mill to the *universal* conclusion, the philosophy and logic of what has claimed to be one of the great achievements of modern thought may be lucidly presented as follows:

Why are we to believe that any given event has a cause?

*Because experience assures us of it.*

Why are we to believe experience?

*Because the course of nature is uniform.*

Why are we to believe that the course of nature is uniform?

*Because of (a larger) experience.*

Why are we to believe (a larger) experience?

*Because the course of nature is uniform, etc., etc.*

The logical circle is apparent. But this is not the worst of it. The same fallacy pervades every part of the entire system. Even that great modern discovery of the four Experimental

<sup>1</sup> See "Logic," book iii., chapter iii.

Methods is utterly vitiated by it. Professor Jevons has clearly brought out the beautiful logical cosmogony of this experiential system :

" The universal law of causation is represented by the world resting upon the elephant—that is, upon inductive inquiry—and the four legs of that quadruped may correspond to the four pillars of Mill's edifice, the four celebrated experimental methods. But upon what do the elephant's legs rest? Upon the world—the world which is already resting on the elephant's back?"

Upon such a logical quicksand this man of wonderful logic and sublime candor would invite the unsuspecting advocates of theism to build their argument for a First Cause. Now it is a pertinent question, Did he state the case in this way consciously or unconsciously—*i.e.*, did he play the part of the sharper in logic, or of the man practically ignorant of logic? His friends may have their choice between keeping his candor or his logical acumen. The fact that in a later chapter of his "Logic" Mill shows that he is at least partially conscious of the illogical character of his system, inclines us to think it an instance of the invitation of the spider to the fly, " Will you walk into my parlor?" Once for all, the fly respectfully declines.

#### FIRST STAGE OF THE DISCUSSION.

Mr. Mill undertakes to establish that no other First Cause than Force is needed for the material universe. His order is :

1. The unchangeable element, or matter, needs no First Cause, for it is eternal.
2. The changeable element needs no First Cause, for the prior event observed in each case is sufficient to account for the changes.

3. Or, if there be a First Cause needed, Force is all-sufficient.

These will be considered in their order.

1. *Mill's statement of the first point.*—The unchangeable element in nature needs no First Cause :

" The fact of experience, however, when correctly stated, turns out to be, not that every thing which we know derives its existence from a cause, but only every event of change. There is in nature a permanent element, and also

<sup>1</sup> Jevons, " The Experimental Methods."

a changeable ; the changes are always the effects of previous changes , the permanent existences, so far as we know, are not effects at all. . . . . There is in every object . . . . a permanent element, viz., the specific elementary substance or substances of which it consists and their inherent properties. These are not known to us as beginning to exist : within the range of human knowledge they had no beginning, consequently no cause, though they themselves are causes or con-causes of every thing that takes place. Experience, therefore, affords no evidences, not even analogies, to justify our extending to the apparently immutable a generalization grounded only on our observation of the changeable."—*Three Essays*, pp. 142-3.

The reader will note the opening correction of the form of statement which Mill himself put into the mouth of the theist. Did he misstate the theistic position in order to gain prestige in the eyes of the uninformed, by the superior precision of thought shown in the *ad captandum* correction? But why not make the further correction, demanded by candor and fairness, and state his opponent's true position : " Every event *must have* a cause " ?

The argument may be best dealt with when thrown into syllogistic form :

Every thing that has had a beginning requires a cause.

Matter, or the permanent element in nature, has not had a beginning within the range of human experience.

Therefore matter does not require a cause.

The fallacy comes to light at once. Different middle terms are used in the premises. In one, " had a beginning " is used absolutely ; in the other there is covertly substituted for this the expression, " had a beginning within the range of human experience." It would be just as logical and conclusive for an ignorant Philadelphian, if there be such a one, who has never been beyond the city limits, standing in the Depot of the Pennsylvania Railway, to reason thus : Whatever has no end is infinite ; this railway has *no end within the range of experience* ; therefore it is infinite.

The truth is that here is just the point where Mill makes the leap across the narrow limits of human experience to the eternity of matter. It is the same kind of feat which Professor Tyndall performed in his Belfast Address, in which, by *experience* (which, according to the view of these men, is the limiter, or extreme limit, of all knowledge) he prolonged his vision " be-

yond the bounds of experience" until he was able to "discern" in "matter" the promise and potency of all life, a feat compared with which—whether performed by Mill or Tyndall—lifting himself to the moon by his boot-straps or shooting himself to Sirius with his own breath would have been mere child's play. The baselessness of the covert assumption in the argument and the fallacy in the inference are patent the instant it is thrown into logical form. If experience shows that matter had a beginning, then it needs a cause, and the idea of causation must be extended to it; but experience does not so show; therefore matter needs no cause, and the idea of causation is not to be extended to it. The conclusion is reached by denying the antecedent, and then, on the ground of this, denying the consequent, thus violating one of the simplest canons of conditional reasoning. Suppose experience does not show that matter had a beginning; may not something else show it? Or, may not experience *plus* something else show it? The logic of the reasoning may be readily illustrated so as to make it clear beyond misunderstanding. If there is a fire in the furnace the rooms in the house will be warm; but there is no fire in the furnace, therefore the rooms are not warm. But suppose there be heated stoves in the rooms? Or, that it be a hot day in mid-summer? Or, that the house be on fire?

Let the pertinent question be asked: *Whose* experience is the basis of the reasoning in this case? Is it Mr. Mill's? Evidently he is quite too modern a character to know by experience what has been true from eternity. It would certainly be impossible to prove matter eternal, even if it were actually so, from his experience. Or is it collective human experience? Even that affords little logical aid in reaching back to eternity, for it is itself at once brief and narrow in its range—brief, inasmuch as all human experience reaches back over only an infinitesimal part of eternity; and narrow, since it only reaches the surface of things on this atom world, and any one man can only command a knowledge of the smallest portion of it at that. Mill attempts to leap the boundless and bottomless chasm between his relatively infinitesimal human experience of the present and this absolutely limitless eternity of the past, by his scheme of induction, and he would fain confine his theistic op-

ponent to the same method. He takes his position on the perfect globe of exact science to manage this greatest of logical enterprises—the exclusion of a First Cause from the universe of matter. His world rests securely on the back of the elephant of induction; the elephant is supported by his four legs—the four experimental methods. But where is the tortoise, from whose back the elephant is to take his leap and bear the great philosopher into the infinities and eternities in order to rout the First Cause?

But it is far from being the whole truth that experience cannot possibly prove the eternity of matter. Taking the view of some of the ablest and best physicists, it absolutely disproves it. They hold that in the present age it has become capable of strictly scientific proof that the universe had a beginning in time.

According to Sir William Thomson's deductions from Fourier's "Theory of Heat," the dissipation of heat can be traced down to a time when all things will be uniformly cold. If we attempt similarly to trace the heat-history of the universe backward we reach an impassable limit. As stated in the "Principles of Science":

"For a certain negative value of the time the formulæ give impossible values, indicating that there was some initial distribution of heat which could not have resulted, according to known laws of nature, from any previous distribution. . . . Now the theory of heat places us in the dilemma either of believing in creation at an assignable date in the past, or else of supposing that some inexplicable change in the working of natural laws then took place. Physical science gives no countenance to the notion of infinite duration of matter in one continuous course of existence. And if in time past there has been a discontinuity of law, why may there not be a similar event awaiting the world in the future?"

Clerk Maxwell, in his "Theory of Heat," and Professor Tait, in his "Lectures on the Recent Advances in Physical Science," urge other considerations in favor of the same view. Professors Stewart and Tait, in that extraordinary book "The Unseen Universe," making use of the investigations of Helmholtz, Struve, Thomson, Clerk Maxwell, and others, have pushed their inductions still further.

The voice of the latest and best science, in the form of

mathematical physics, is therefore raised in opposition to the eternity of matter, and the argument is altogether against Mill's assumption. If the results of the best inductive science are to be included in human experience, it requires nothing more than experience to overturn this argument based upon the assumed eternity of matter. What then becomes of his conclusion, carried with him from this point onward as an established principle, that matter is a cause or con-cause of every thing, and itself apparently immutable?

In the last analysis all there is of the argument is one vast conclusion from the great logician's *ignorance*. It takes but little science or logic to show that *what one does not know* about a thing is not a very firm basis for argumentation. Were Mill's mighty "Ignoramus" a little greater or a thousandfold less, it would hardly help him to the knowledge that there is no First Cause.

*2. Mill's statement of the second point.*—The changeable element in nature needs no First Cause.

"As a fact of experience, then, causation cannot legitimately be extended to the material universe itself, but only to its changeable phenomena; of these, indeed, causes may be affirmed without any exception. But what causes? The cause of every change is a prior change; and such it cannot but be; for if there were no new antecedent there would not be a new consequent. If the state of facts which brings the phenomenon into existence had existed always or for an indefinite duration, the effect also would have existed or been produced an indefinite time ago. It is thus a necessary part of the fact of causation, within the sphere of our experience, that the causes as well as the effects had a beginning in time, and were themselves caused. It would seem, therefore, that our experience, instead of furnishing an argument for a First Cause, is repugnant to it; and that the very essence of causation, as it exists within the limits of our knowledge, is incompatible with a First Cause."

—*Three Essays*, pp. 143-4.

The main points in the argumentation may be brought out as follows:

No changes which can be traced by experience to prior changes, or antecedents, need a First Cause;

All the changes in nature can be so traced, since experience reveals, as an essential part of the fact of causation, that causes as well as effects have a beginning, and, therefore, have antecedents—the antecedents extending back without limit;

Therefore no changes in nature require a First Cause to account for them.

The validity of this reasoning depends upon three apparently very plausible assumptions :

(1.) Experience reveals a prior change as cause of every event.

(2.) Cause and effect are simply the relation of antecedent and consequent.

(3.) An infinite regression of antecedent and consequent events will take the place of an efficient cause, and satisfy the demands of reason.

Is any one of these assumptions in accordance with truth ?

(1.) It cannot for one moment be admitted that experience reveals a prior change as cause for every subsequent change.

Take experience in the narrow sense even, and this is a monstrous assumption. There are myriads of changes within the experience of the most philosophic of thinkers which he has never traced to any prior changes. Professor Jevons puts the case thus :

“ Will any one deny that there are whole regions of effects familiarly known to us where we cannot detect the action of causation ? What determines the sex of young animals ? What produces unexpected forms and diseases, monstrous births, *lusus naturæ* as they are significantly called ? All kinds of tumors, ulcers, and local diseases spring up in various parts of the human body, and medical science can usually give no explanation of them.”

But the use of experience here demanded is manifestly the wider one. Mill’s claims are, in case of this wider experience, still more absurd.

There is, moreover, a glittering and deceptive generality in the expressions, “ change ” and “ changeable element.” What do they mean ? *Apparently* not very much ; *really* pretty much every thing worth mentioning. They are intended to cover up a tremendous assumption, which if stated in full would be rejected instantly by every man of sense, not to say of science. They at least cover every thing material in the universe except matter itself—all special forms and collocations of matter and force. These vague words cover all vegetable life, all animal life, and possibly all rational life !

Now it is positively certain that experience, in the only

sense of that word here logically available, gives a flat denial to Mill's assertion. To set aside all revelation, tradition, and history, geology and the kindred sciences, in connection with the theories of heat and life, make it scientifically clear that when plant life, animal life, and human life are carried back to certain stages in the history of the globe, points are reached where it can be said, "That was the first plant;" "That was the first animal;" "That was the first man." The capital assumption of fact in Mill's argument has, therefore, not the slightest support from experience, or, rather, experience gives the lie to it. Whence came all these gigantic changes, these multitudinous and instantaneous "apparitions" of living beings, if not from the First Cause?

(2.) The second assumption is the fundamental lie of positivism. There is no such thing as *efficient cause*, or if there be, we cannot know it. There is only the relation of before and after, of antecedent and consequent. This exhausts our idea of causation.

Mr. Mill assumes that in the relation there is always a *sequence*, the cause being before the effect in time. Now most certainly there are cases in which the relation looks very much more like that of *simultaneity*. If I hurl a stone with my hand the force acts contemporaneously with the effect perceived. Nor is there any truth in the view that a *cause* is in every case a prior *phenomenon*. A phenomenon, in the positivist sense at least, appears to the sense, and can be described by its appearance. The impelling force of the will is the cause of the movement of the stone hurled from the hand; the modifying force of gravitation comes in as another cause to decide the curve described by the projectile; but neither the force of will nor of gravitation was ever directly apparent to sense. No force was ever thus apparent to human sense.

But Mill's chief error is, that he positively excludes the one essential element in causation, viz., *efficiency*. A cause—both in the common sense and in the metaphysical sense—is that which has power to produce change.

Mr. Mill's definition of *cause* is one of his most wonderful performances.<sup>1</sup> He remarks that,

<sup>1</sup> See "Logic," book iii., chap. v., On the Law of Universal Causation.

“The notion of cause being the root of the whole theory of induction, it is indispensable that this idea should, at the very outset of our inquiry, be with the utmost practicable degree of precision fixed and determined.”

That is certainly a very commendable view of the matter. How does he carry it out? He proceeds at once to distinguish between *efficient* causes, or such as actually *produce* effects, and *physical* causes, or those which do not involve such production of effects. He will have only to do with the latter; in other words, in his treatment of “The Universal Law of Causation,” he will have nothing to say of *cause* in the sense in which both the common people and the philosophers have always understood the word. It is to be the play of Hamlet with the Prince of Denmark left out.

We follow him as he proceeds to find, fix, and determine, “with the utmost practicable degree of precision,” the notion of cause.

“The law of causation, the recognition of which is the main pillar of inductive philosophy, is but the familiar truth that invariability of succession is found by observation to obtain between every fact in nature and some other fact which has preceded it, independently of all consideration respecting the ultimate mode of production of phenomena, and of every other question respecting the nature of things in themselves.”

It is manifest that Mill would teach that our knowledge of the cause of a thing comes from *our* experience, and from *our* observation of facts occurring and of facts preceding. Of course, experience in which we have had no share, and which we can never verify, would furnish no foundation for a philosopher. It is plain, too, that he discards all obscure metaphysics. But, unfortunately for the logician, he comes upon the objection of Reid, that if this doctrine is correct, “night must be the cause of day, and day of night, since these phenomena have invariably succeeded one another from the beginning of the world.” We shall not attempt to follow through the paragraph which treats of this, and which one has aptly called the “Laocoön of Logic.” The definition must of course be modified so as to get in something besides invariability of succession. It then reads as follows:

“We may define, therefore, the cause of a phenomenon to be the antecedent, or the concurrence of antecedents, upon which it is invariably and

*unconditionally* consequent. Or if we adopt the convenient modification of the meaning of the word cause, which confines it to the assemblage of positive conditions, without the negative, then instead of 'unconditionally,' we must say, 'subject to no other than negative conditions.' "

But our author is not yet done. He must explain what is meant by this expression, *negative conditions*, which furnishes the tail that is to fly this wonderful logical kite.

" The negative conditions of any phenomenon, a special enumeration of which would generally be rather prolix, may be all summed up under one head, namely, the absence of preventing or counteracting causes."

This is an amazing relief. We are now prepared for his construction of the final notion of cause "fixed and determined" "with the utmost practicable degree of precision."

" We may define, therefore, the cause of a phenomenon to be the antecedent, or concurrence of antecedents, on which it is consequent invariably, and subject only to the absence of preventing or counteracting causes."

We have at length reached the triumph of logic, in a conditional unconditionality, and a variable invariability, and have found that the last and perhaps most emphatic word in the definition of a *cause* is the word *causes*! If we can understand that, the definition is all plain.

This is certainly one of the curiosities of literature, surpassing Hume's celebrated chapter on the same subject. Besides defining *cause* by *causes*, and treating of *causation* without *efficiency*, the author perpetually contradicts himself in his logical jargon, eats up his own first principles and definitions, and in his straits makes constant appeals to *necessity*, or, as one has phrased it, to "the grand old tortoise, whose mustbeity and perseity are at the bottom of the understanding of all sham science."

But while the prince of logicians had the ability "to fix and determine" the notion of cause with such "precision," we shall find that he was scarcely able to use the term with as much precision. The truth is that Mr. Mill was an admirable illustration of the prodigy who thinks differently with the two sides of the brain. It was necessary that with one side he should think as a positivist, and so root out of logic all idea of real causal efficiency, or he could not get rid of God, the author and upholder

of the universe. It was equally necessary that with the other side he should think with a little common-sense, and so furtively bring in here and there this hated and exorcised spirit of causation, lest he should utterly wreck all science by leaving no logical bottom for it. So his notion of causation becomes a variable invariable throughout all his writings. He is constantly performing the feat of the man trying to ride two horses in precisely opposite directions at the same time, and striving to conceal the fact from himself and others. After devoting half his Logic to proving that there is no causal force, no active power in matter, he turns squarely about, and, in his treatment of *Fallacies*, insists that matter can not only act, but that it can act through absolutely void space, and without any media whatever, and thinks Newton and his scientific adherents a pack of fools for denying it ! This is but a single illustration of what is to be found everywhere in his writings, in which consistency is certainly a very rare jewel. In fine, whenever a man of common-sense and clear thought comes, in Mill's writings, upon this unlucky word in *ation*, he feels the same perplexity as the Irishman, of whom Miss Edgeworth tells us, who accosted an acquaintance thus : " When first I saw you, I thought it was you ; but now I see it's your brother."

(3.) But what of the third covert assumption of the argument? Is it true that this regress of antecedents, or prior events, no one of which has any causal efficiency, can satisfy the demands of reason for a cause and a First Cause?

The point of Mill, when fully stated, is reduced to the old form of *an eternal series of effects*, with the causal efficiency taken out of each and all in the series. There is the less necessity for dwelling upon it, since it has been so often answered. What the mind demands is a sufficient cause for the last consequent and for every antecedent in the series. If a chain of ten links cannot support itself in the air, much less can one of a million links, infinitely less can one of an infinite number of links.

But with Mill's view the case for the anti-theist is even worse. The causal power being left out by his very definition, no link has any support from its immediate antecedent even, the only connection being that of sequence in time. There are in

fact no *links*. The position is, therefore, utterly absurd. The principle of sufficient reason compels the assumption of a self-existent cause to account for all these dependent phenomena. Accordingly, the great thinkers of all ages, from Plato and Aristotle down to Hamilton and Ulrici, have acknowledged this as a *thought necessity*. No rational being can be satisfied without it.

Mr. Mill's argument for excluding a First Clause from what he calls the "changeable element" of the material universe is therefore even less successful than that for excluding him from the so-called "unchangeable element."

3. *Mill's statement of the third point.*—If there be any First Cause needed for the material universe, Force is all-sufficient.

The author now takes it for granted that experience has shown—evidently not quite satisfactorily to himself, however—that all causes have a beginning; but if any thing is still needed to satisfy the demands of reason for a First Cause, it is readily to be found without resorting to the threadbare and unscientific hypothesis of theism. His line of argument, given in abridged form, is substantially as follows:

(1.) If, however, there be in all causes a permanent element which had no beginning, then this may, with some justice, be termed the First or Universal Cause, though not a sufficient Cause, of the material universe and its changes, since it is a concomitant in all causation.

(2.) There is such a permanent element found in Force, since the doctrine of the Conservation of Force has been established by the converging evidence of all branches of physical science.

(3.) Therefore experience proves that Force is the all-sufficient First Cause of the material universe and its changes, since the doctrine of materialistic evolution is true.

This is certainly sufficiently sweeping to suit any "advanced thinker." The author seems conscious of having reserved his strong point for the last. He brings his power of "analysis" to bear, and his friends insist that he is the master of analysis. His array of confirmatory or buttressing arguments seems absolutely overwhelming. The prosyllogisms and episyllogisms almost cover up the essential propositions. What is the strict logical value of all? Is the structure a granite castle or a house of cards?

(1.) The halting form of the major premise vitiates the argument. It is admitted that such a permanent element cannot

be a *sufficient* cause. If that be so, what room for further argument on the point? It is assumed that a *concomitant* of a thing is to be identified with its *cause*. Consciousness always accompanies memory, but is it therefore identical with memory? Note of this distinction would have saved no less a man than Sir William Hamilton from great confusion in his "Metaphysics." Mill had still greater need of caution. Suppose that, so far as Mr. Mill's experience shows, a boy's clothes do always accompany the boy; are they, therefore, to be considered either as a *con-cause* or as the first cause of the boy? The phrase, "with some justice," is a touch of that "invariable variability" element, or of what one has called *philosophic trimming*, of which this great logician finds it necessary to avail himself so frequently. If this permanent eternal element always accompanying all causes or changes may *with some justice* be called the First Cause, it is pertinent to ask with *how much* justice? Especially is this question pertinent, if, as Mill admits, it is "not sufficient of itself to cause *any thing*!" But note further Mr. Mill's "*may be* the first cause." This innocent "*may be*" turns up before the logician reaches his conclusion, as a relentless "*must be*," when we read: "This it is to which apparently . . . we *must* assign the character of First Cause;" and again, "the First Cause *can be* no other than Force."

The entire procedure requires no ordinary logician. That which cannot be a *sufficient* cause for *any thing*, *may be* with *some justice* termed a *first* or *universal cause*—in fine, after another shake of the juggler's hat, *must be* accepted as *the sufficient first cause of the material universe!*

(2.) Mill finds such an insufficient-sufficient, first and universal cause and non-cause, in eternal Force.

Just a little before experience was found establishing on the basis of its infinite "don't know" the eternity of matter; here it is found establishing on the same basis the eternity of force. The latter conclusion is logically as worthless as the former. What scientific warrant has Mr. Mill for planting himself on this infinite *Ignoramus*, and pronouncing force eternal? Even if it were so, it would, as we have already seen, be utterly and forever impossible for him, on his unscientific hypothesis of knowledge, to know it.

The logician plants himself on the doctrine of the Conservation of Force, "the last result of physical inquiry, derived from the converging evidences of all branches of physical science." Now if this doctrine be true, and if it include as true that the quantum of force in the universe is invariable, that all force is one, and that all the changes in the universe depend upon the amount and collocations of this one force, it becomes evident at once that very little room is left for theism.

Is this doctrine, of which Mill, Spencer & Co. make so much, a doctrine established by all science?

Two leading British scientists, in a preface to the remarkable joint production already referred to, after complaining of the utter ignorance of their critics concerning what is meant by Force, conclude thus:

"In addition to what we have said on the subject in the text, we would now only mention that the sole recorded case of true Persistency or Indestructibility of Force, which we recollect having ever met with, occurs in connection with Baron Munchausen's remarkable descent from the moon. It is, no doubt, a very striking case; but it is apparently unique, and it was not subjected to scientific scrutiny."<sup>1</sup>

Faraday tried to discover experimentally what might be correctly called *conservation of force*. He was not satisfied with the mode of statement of Newton's law of gravitation, according to which the attraction of two bodies is said to *vary* inversely as the square of their distance from one another. As the attraction at twice the distance decreases to one fourth of what it was, what becomes of the three fourths that have disappeared? With all his skill he reached no result.<sup>2</sup>

Strictly speaking, *Force* has had "one, and only one, definite, scientific sense since the publication of the 'Principia.'" It is implicitly contained in Newton's first law of motion, and may be given as follows: "Force is any cause which alters or tends to alter a body's natural state of rest or of uniform motion in a straight line." It must be understood, however, that the word "cause" in this definition does not imply the objective existence of force. Force, in its proper sense, is "a pull, push, weight, pressure, etc., and can be measured, in the vernacular

<sup>1</sup> "The Unseen Universe," Preface to fourth edition.

<sup>2</sup> Tait's "Recent Advances," p. 356.

of engineers, as equivalent to so many pounds weight." It does not properly mean "work done by a force," nor is it equivalent to the modern term *energy*. Confining *force* to its strict scientific use, the Conservation of Force is an utter absurdity, and the use of the phrase by evolutionists shows a want of clear scientific knowledge. Obviously, every *push*, *pull*, pressure, must be a *transient* event. Or, if the doctrine be understood as including under force "the work done by force," that is in no proper sense of the word *persistent* or *indestructible*. It may take a thousand different forms, or be utterly destroyed.

But suppose *force* to be used in a loose and unscientific way for *energy*. The doctrine of the conservation of energy—originally suggested by Newton (as was almost every thing else of which certain noisy experimental physicists of this age boast), and developed by Rumford and Davy, Colding and Joule, Helmholtz and Thomson, and others—is a very different thing from the Conservation of Force; in fact, it *annihilates that doctrine*. As gold, lead, oxygen, etc., are different kinds of Matter, so, according to this modern view, sound, light, heat, etc., are now ranked as different forms of Energy. Energy has been defined as "the power of doing work in whatever that power may consist."<sup>1</sup>

Now even if it were demonstrated that there is always the same *quantum of energy* in the universe, that may be shown to be the poles apart from the proposition that the *quantum of force* is always the same. For energy exists in two forms—*Potential Energy*, or energy of position, as in a wound-up spring or weight, as in a clock, in a bent bow, or in gunpowder; and *Kinetic Energy*, or energy of motion, as in the running water, or the falling avalanche. The activities of the material universe may be said to result from the transformation of energy from one of these forms into the other. Now the ablest of physicists have shown that the availability of energy for the performance of work depends upon the unequal distribution of heat; that at each transformation of heat-energy into work a large portion is degraded or dissipated, and less of it available for any future transformations; that, in other words, the tendency of heat is

<sup>1</sup> Tait's "Recent Advances," p. 353.

towards equalization.<sup>1</sup> The potential energy of the universe will at length be transformed into a practically useless state of kinetic energy, and uniform temperature will prevail throughout the mass. That is, the *force* in the universe—the *push* and *pull* of Professor Tyndall—is constantly lessening in *quantum*, and practically will at last reach zero. The history of the material universe is, in short, the history of the fall from the highest form of potential energy to this practical zero of potential energy, and has been brought, by mathematical calculation, within definite and narrow limits—say within ten or fifteen millions of years at the utmost from the side of the past, and perhaps less from the side of the future.<sup>2</sup> *Force in the material universe must inevitably perish.*

What then becomes of Mr. Mill's scientific idol? It is but a poor foundation on which to build his large superstructure of a first and universal cause. "Push" and "pull" are very poor material out of which to attempt to construct a universe without a Pusher and Puller.

Has the second assumption of Mill any better scientific basis? Do "the converging evidences of all branches of physical science" show that all forces are but forms of this one material force, and that any one of them may be transformed into any other one? The ablest scientists in the different spheres involved must, of course, be in the best position to judge of this doctrine of the unity of force, and the appeal must be to these men.

Almost twenty-five centuries ago Parmenides of Elea taught in substance :

" That which truly is, is without origin and indestructible, a unique whole, only-begotten, immovable, and eternal; it was not and will not be, but *is*, and forms a *continuum*."

Dr. Büchner, who in this late age announces this doctrine as a wonderful modern discovery, assures us that now

" The naturalist *proves* that there are no other forces in nature besides the physical, chemical, and mechanical."

Dr. Elam—certainly a most competent authority to speak

<sup>1</sup> "Unseen Universe," p. 127.

<sup>2</sup> "Recent Advances," p. 167.

from the point of view of chemistry—responds to this in the name of exact science :

" Once for all, it cannot be too clearly understood that this claim is utterly without foundation. No vestige of what can fairly be considered *proof* of the doctrines of materialism has ever been offered. Now, as two thousand years ago, they rest only upon arbitrary assumption and conjecture."

He protests against the extreme form of the theory of *heat*, which uses the terms in what he characterizes as

" The *non-natural* sense, which is now so fashionable, as being synonymous with all motion, all action, all affinity, all change in molecular arrangement of every kind. . . . . It may be very philosophical to consider all forces as one, and this one mechanical, and call it heat ; but such hasty generalizations tend but little to any true advancement of science."<sup>1</sup>

It should be noted that Professor Tait and the scientific physicists of the higher order do not hold that the various forms of energy are *identical*. Faraday, a no less competent authority on electricity and kindred subjects, devoted much time for twenty years to an effort to show experimentally that gravitation *is in some way related to* electricity, magnetism, and the other forces, but without the least result in favor of any such relation.<sup>2</sup> Dr. Lionel Beale, the authority in biology, assures us that

" Correlation is the 'abracadabra' of mechanical biology. . . . . The phenomena formerly supposed to be due to 'differentiation' are now regarded as the work of correlation. . . . . But as yet no operation characteristic of any living being has been explained upon any physical principle. . . . . Not the shadow of proof in favor of the analogy supposed to exist between life and other forces has been yet adduced."

Dubois-Reymond, who has given a large part of his life to the investigation of the connection of thought with the brain, and who is all the more competent as a witness for the reason that the desire to prove the identity of molecular movement and consciousness has been a moving spring in his investigations, reaches the conclusion that,

" There is and must forever remain an impassable chasm between definite movements of definite cerebral atoms and the primary facts which I can neither define nor deny. *I feel pain or pleasure, I taste a sweetness, smell a*

<sup>1</sup> Elam, " Man and Science."

<sup>2</sup> Jevons, " Principles of Science," p. 586.

*rose scent, hear an organ tone, see red, together with the no less immediate assurance they give, therefore I exist."*

These authorities close the circle against Mr. Mill's assertion. Even the so-called mechanical and chemical forces are neither identical nor convertible. The so-called mechanical, chemical, vital, and mental forces are in no materialistic sense one. If the term *correlation* is used to express the idea of the harmonious interdependence and interplay of all forces, we accept it. There is such a relation, brought about by the correlating will of the Governor of the universe. But if in place of this meaning, the scientific jugglers introduce the *convertibility, identity, and essential unity* of all the forces, then, in the name of clear thinking and exact science, we enter a protest against its use.

Mill's further assumption, that all the changes in the universe depend upon the "amount" and "collocation" of this one force, must, of course, fall to the ground with the doctrine of the unity of force. It may not be amiss, however, to ask, Whence the "collocations," including as they do all inorganic forms, all plants, all human life and activity? They certainly need to be accounted for. Are they due to chance? Or is this "Protean Force," versatile as St. Patrick—who, according to Carlyle, swam across the Irish Channel with his head in his teeth—able to get under itself and lift itself over this chasm of "collocations"?

(3.) Turning to the conclusion of the argument—a conclusion that, as Mill seems to feel partly conscious, swings loose from the premises—we find it resting at last on the assumption of the truth of materialistic evolution. The great logician would have us believe that the converging evidence of all exact science has demonstrated the truth of this antique-modern hypothesis.

The assertions of advanced evolutionists are so confident as to demand a somewhat careful examination. What is evolution? Who are the proper scientific authorities to decide upon its truth or falsity? What, as a matter of fact, is their decision?

Herbert Spencer, "the Apostle of the understanding," will define the term for us:

"Evolution is a change from an indefinite incoherent homogeneity to a

definite coherent heterogeneity, through continuous differentiations and integrations."

What does that mean? With men of exact science "differentiation" and "integration" have a very important and definite signification; but manifestly Mr. Spencer has no conception of any such meaning. Is the definition simply a blinding mass of large words in *ution, ation, and ity*? A keen critic recently translated it into English:

"Evolution is a change from a no-howish untalkaboutable all-alikeness, to a somehowish and in-general-talkaboutable not-all-alikeness, by continuous something-elsifications and stick-togetherations."<sup>1</sup>

We think the translation brings out the precise scientific import in the most intelligible form. But supposing that the definition has a meaning which the scientists apprehend, or, at least, that there is a hypothesis of materialistic evolution which may be definitely stated, according to which the existing universe, from the molecule to the man, has been evolved from the original fire-mist—who is to be the authority in deciding whether this hypothesis deserves to be accepted as exact science?

The scientists may be allowed to answer the question, provided they will do it on sound common-sense principles. One of the most competent of them has given a satisfactory answer:

"That which is properly called Physical Science is the knowledge of relations between natural phenomena and their physical antecedents, as necessary sequences of cause and effect; these relations being investigated by the aid of mathematics—that is, by a method in which processes of reasoning, on all questions that can be brought under the categories of *quantity* and of *space-conditions*, are rendered perfectly exact, and simplified, and made capable of general application to a degree almost inconceivable by the uninitiated, through the use of conventional symbols. There is no admission of any but a mathematician into this school of philosophy. But there is a lower department of natural science, most valuable as a precursor and auxiliary, which we may call scientific phenomenology; the office of which is to observe and classify phenomena, and by induction to infer the laws that govern them. As, however, it is unable to determine these laws to be necessary results of the action of physical forces, they remain merely empirical until the higher science interprets them."<sup>2</sup>

The scientist of the first order is "the skilled artificer with his plan and his trowel;" while the one of the second order is

<sup>1</sup> "Recent Advances," pp. 348-9.

<sup>2</sup> Kirkman, p. 292.

"the hodman" who "hands up to him all the requisite bricks and mortar." To the first order belong such men as Newton, Helmholtz, Sir William Thomson, and Clerk Maxwell; to the second, such men as Darwin and Tyndall, and Bastian and Haeckel and Büchner. Manifestly they only who are of the first order, or who approach it, are competent authority in matters of exact science. What have they to say on the subject?

Not one of them can be found to pronounce the hypothesis of materialistic evolution *exact* science, or science of any sort, unless it be "science falsely so called."

Dr. Elam declares it to be without shadow of proof. St. George Mivart, the most accomplished naturalist in England, has pronounced it a "puerile hypothesis." Professor Agassiz, in the last sheets to which he put his corrections, subjected it to the most pitiless and destructive criticism. Professor Virchow, of Berlin, perhaps "the foremost chemist on the globe," a man, according to the London *Times*, "opposed to every species of orthodoxy, and altogether innocent of faith," in his great address at Breslau, in reply to Haeckel, declares it to be little more than the famous and long since exploded doctrine of *generatio equivoca*, and affirms that "*all real scientific knowledge has proceeded in the opposite direction.*" Still more recently, in his "Quarterly," he has attacked the extravagances of advanced Darwinism even more vigorously, styling the circles of materialistic evolutionists "bubble companies."

We close the circle of testimony with that of Professor Tait, in which he gives the scientific estimate of the pretentious scism engaged in blowing the evolution bubble:

"On the other hand, there is a numerous group, not in the slightest degree entitled to rank as physicists (though in general they assume the proud title of Philosophers), who assert that not merely Life, but even Volition and Consciousness are merely physical manifestations."<sup>1</sup>

He lays violent scientific hands on the pretentious experimental science of the day, and the advanced evolutionism of Tyndall & Co.:

"It gives itself airs, as if it were the mistress instead of the handmaid, and often conceals its own incapacity and want of scientific purity by high-sound-

<sup>1</sup> "Recent Advances," p. 25.

ing language as to the mysteries of nature. It may even complain of true science, the knowledge of causes, as merely mechanical. It will endue matter with mysterious qualities and occult powers, and imagines that it discerns in the physical atom 'the promise and potency of all terrestrial life.' <sup>1</sup>

The only conclusion possible from all this is, that the testimony of all exact science, instead of establishing the hypothesis of materialistic evolution, is really a unit in proclaiming its utter absurdity.

The first part of Mill's scientific argument against a First Cause is, therefore, absolutely without any scientific foundation. Experience does not and can not prove matter eternal; rather, when understood in the proper sense, it shows matter to have originated in time, and, therefore, to need a First Cause. As little does human experience account for the changeable element in nature; that, too, requires a First Cause. In fine, evolution, in the atheistic sense, is an unscientific myth, and force can in no sense be a First Cause for any thing. At no single point has Mr. Mill even weakened the argument for a First Cause by his agglomeration of obscure and false conceptions, of baseless and unscientific assumptions, and of illogical leaps to absolute and universal conclusions from conditional and particular premises.

#### SECOND STAGE OF THE DISCUSSION.

In the second part of his scientific argument Mr. Mill undertakes to make it plain that the so-called spiritual phenomena of the universe need no other First Cause than Force. He states the theistic position, which makes Will the only originator of Force, and then proceeds to show :

1. That it is known that Force is never originated by Will.
2. That, on the contrary, Will has no monopoly even in the transformation of Force.
3. That Mind itself requires only Force and Evolution to originate it.

And so, it is claimed, Mind and all its phenomena disappear from the universe before the wand of this master magician.

<sup>1</sup> Tait, "Recent Advances," Supplementary Lecture on Force, p. 349.

The theistic position attacked by Mill may be stated in abridged form: The *only power* in the universe directly known to us is volition. Changes in matter are *phenomena* to be accounted for. A vast number of these changes, such as the movements of our limbs and bodily organs, are known to be produced by *human volition*. Explaining the unknown by the known, there is no logical escape from attributing the remaining phenomena to some other *Will*, which, by reason of its omnipotence and omniscience, is adequate to the production of them.

1. *Mill's first point in answer to the Theistic Argument.*—It is known that Force is never originated by Will. There are two positions involved in his argument. (1.) Will is not at all a cause of Force; (2.) It is simply an originator of motion through chemical action in the brain.

(1.) The first position Mr. Mill sustains by an appeal to the inevitable doctrine of Conservation of Force, including indestructibility, convertibility, unity, and identity. This has already been shown to be without the slightest scientific warrant. But even if this were otherwise, Mill contradicts himself in his own statement, in which he tacitly admits that *will originates and controls motion*. It has, therefore, at least *directive energy* with which to originate and control. And not only is this directive energy a substantial part of the whole change or effect wrought in human activity; but it is the chief thing, deciding the time, continuance, direction, intensity, and power of human movements. Moreover, will has like control over the vast range of thought or purely spiritual activity. But there is the still better evidence of consciousness against Mill's assertion. We are conscious that will is not only *a force*, but *the one only force* of which we have absolutely certain knowledge; not only *a cause*, but *the one cause* from which we derive all our knowledge of other causes. Years ago, Professor Bowen presented this point with almost the force of demonstration in his "Metaphysics and Ethics." A recent British writer<sup>1</sup> of marked ability has put it with demonstrative force. He rests the case upon three propositions concerning force, of which we have demon-

<sup>1</sup> Kirkman, "Philosophy without Assumptions." A work of remarkable power.

stration. We barely indicate the train of thought, to lead the reader, if may be, to the study of the book itself.

Proposition A. "The only force which is directly given and immediately known to me, is my own will-force ; and all my knowledge of other forces acting in the Cosmos is mediate, and found by logical inference."

I am conscious, and therefore absolutely certain, that I have and exert will-force. I can demonstrate my possession of this force to myself and others by my power of predicted action. I can show any one else how to demonstrate the same thing for himself and for others. That "all my knowledge of other forces acting in the Cosmos is mediate, and found by me by logical inference," may be demonstrated by experiment.

Proposition B. "My will-force is my only force-finder," that is, the only power that can "find with demonstration, so that I can show you how to find."

This proposition has been experimentally demonstrated to hold true, whether the force be one with which we can come into direct conflict by our exerted will-force, or whether it be one of whose action we obtain proof only by a train of reasoning from verified facts. I will in act, and I know that I will. Here I find my own will-force. I will in act, and find my will-force baffled, and I infer, by the principle of causality, that some other force has baffled mine. Thus I find and measure all other force than mine.

Proposition C. "In every train of reasoned thought about any force or forces found in action in the Cosmos, the fundamental proposition out of which all my other propositions flow, and on the certainty of which their truth to me depends, is this—In finding force, *I will in act, and I know that I will* ; so that if all the steps of the reasoning be written down without omission in their order, this proposition must stand written at the head of all—*In first finding force in this inquiry, I willed in act, and I knew that I willed.*”

This manifestly follows directly and inevitably from propositions A and B.

The conclusion, logically unavoidable, is, that our whole idea of force, power, cause, is identical with that of will, or deduced from it. We consciously originate the exercise of power, and the bafflement of our will leads us as recipients to admit the exercise of power upon ourselves. The former power

we know directly as power, by consciousness, the latter is only reached by inference. Mill's assumption, that will-force is never an originating cause, is, therefore, without the shadow of foundation in human experience, which, on the contrary, assures us that it is the *only directly known originating cause*.

(2.) But Mill affirms just as confidently that, "according to the best lights of science," it is known that will-force is chiefly or entirely the result of transformed chemical force in the brain, so that the two are identical.

Does the great logician mean "chiefly" or "entirely"? If "chiefly," then there is room for independent volition; if "entirely," then of course man is only an *automaton*. But is it *known* that will-force is entirely or in any proper sense the product of chemical changes in the brain? If it be known, who knows it? The opinions of the "best lights of science" have already been given to the contrary, and among them that of Dubois-Reymond. In opening the discussion of the limits of scientific knowledge, this latter scientist writes:

"I will now prove, as I believe, in a very cogent way, not only that, in the present state of our knowledge, Consciousness cannot be explained by its material conditions, but that from the very nature of things it never will admit of explanation by these conditions."<sup>1</sup>

In this opinion there is almost, if not quite, absolute unanimity on the part of those who have a just claim to be considered as authorities in this department of science.

But perhaps Mr. Mill, were he living, would insist upon citing Professor Tyndall as the representative of his "best lights," and would quote the now famous "Birmingham Address," as containing a demonstration that will-force is simply transformed chemical force, and man, therefore, only an *automaton*, with no more free will than the moon or a kitchen clock. If so, let him have the benefit of the most advanced thought.

"Man is a machine worked only by natural and necessary forces, therefore an *automaton*; therefore irresponsible, since the robber, the ravisher, and the murderer cannot help robbing, ravishing, and murdering."<sup>2</sup>

It only needs the consciousness and conscience of any man

<sup>1</sup> "Ueber die Grenzen des Naturerkennens."

<sup>2</sup> "Birmingham Address."

of common-sense to sweep the demonstration out of existence. Equally fatal is the scientific test. One of the most competent of British scientific critics makes two points against the Birmingham argument: first, if all Professor Tyndall's so-called facts were fully established, they would not touch the questions of the origination of action or of automatism; and secondly, waiving the question of the relevancy of the argument, the so-called scientific facts and statements, brought forward in the passage upon which the whole argument turns, are "*in direct contradiction to the well-known and established facts of science*—a contradiction as absolute and astounding as it is inexplicable."<sup>1</sup> The position that what may be called "consumption of fuel" always *attends* the performance of mechanical work by animal muscle is of course admitted; but the same assumption would be necessary on any hypothesis of action, whether automatic or free-volitional. But the position that man is an automaton, or a machine, because the law of the working of machines holds of the working of the muscular system, is utterly untenable. The careful and extended researches of Professor Heidenhain, of Breslau, have scientifically demonstrated its falsity. His conclusion has been stated in *Nature* for September 20th, 1877, as follows:

"The fact that in the living muscle *heat always appears* when the muscle does work, is an exception to the general rule in mechanics, that *heat disappears* when work is done."

The law has been more fully stated in scientific language, which brings the light of exact science to bear with greater intensity on Professor Tyndall's wonderful demonstration:

"All machines develop more or less internal heat, according as they perform less or more external work:  $(H + W)$  is a constant quantity. With muscle it is not so; *the more external work is done, the more heat is developed in the muscle*:  $(H + W)$  is, therefore, not a constant quantity, but, in mathematical language, it is a direct function of the variable  $W$ . As  $W$  increases so does  $H$ , although not in an *absolutely* constant degree; for after a certain amount of work has been done, any increase in it is attended by a somewhat *greater ratio* of increase in  $H$ ."<sup>2</sup>

<sup>1</sup> Elam, "Review of Man and Science."

<sup>2</sup> Ibid.

The activity in the muscle, therefore, does not come under the law of mere mechanical action, but precisely reverses it. *A fortiori* the animal of which the muscle forms a part is *not a machine*.

But besides all the muscular exertion which will originates, continues, and directs, science demands that the entire working of *consciousness* under will be taken into account as a definite and positive effect requiring an adequate cause. In this age of vivisection it is shown that if the brain be kept from interfering with the reflex nervous action the circuit is completed in unconsciousness, precisely as it is completed in consciousness when the brain is active. Hence the conclusion, that automatic action is all there is, and that without any spirit the man "would figure away as a molecular automaton all the same, and not a scene or a word would be altered in the five-act comedy of life." But in all this the fact is overlooked that in the one case we have only *movement*, while in the other we have *movement plus consciousness*. The brain with the active subject therefore does more *work* than the other, by what we call *consciousness*. What becomes of this? Does it perish? If so, a portion of *work* has perished, and the idolized conservation of force is logically swept out of existence. If, on the other hand, it be denied that the produced consciousness is "work done," that is to admit that consciousness is not an effect of molecular forces, and to lift it out of the sphere of physical law, and restore again the spiritual world from which the materialist has been seeking to escape.<sup>1</sup>

The conclusion to which we are shut up is, that it is as far as possible from being known that will-force is the result of chemical action; rather, it is known, both immediately and mediately, as well as any thing can be known, that it is not the result of such action. The simple and sole scientific fact on which this imposing structure of automatism is reared is, that chemical action in the brain *may accompany* action of will. This *concomitance* is at once confounded by loose thinkers with *equivalence* and *identity*. (The only scientific course is to accept the testimony of consciousness, and regard the brain as part of

<sup>1</sup> Martineau, "Theology and Religion," p. 182.

the instrument of the human spirit—an instrument *vitally connected* with it, yet an *instrument* still.) We are conscious that the will uses this instrument. The chemical action results from this use, partly in the process of developing power, and partly in the wear and tear necessarily resulting from the use of any mechanical instrument. The chemical action is, therefore, *effect* rather than *cause*.

2. *Mill's second point.*—Will has no monopoly even in the transformation of force.

"Whatever volition can do in the way of creating motion out of other forms of force, and generally of evolving force from a latent into a visible state, can be done by many other causes. Chemical action, for instance, electricity, heat, the mere presence of a gravitating body—all these are causes of mechanical motion on a far larger scale than any volitions which experience presents to us; and in most of the effects thus produced the motion given by one body to another is not, as in the ordinary cases of mechanical action, motion that has first been given to that other by some third body. . . . Volition, therefore, regarded as an agent in the material universe, has no exclusive privilege of origination; all that it can originate is also originated by other transforming agents."—*Three Essays*, pp. 148-9.

The position that whatever will can do other forces can do, is absolutely untenable. It has already been shown that consciousness and directive energy are peculiar to mind, and that will-force is the basal originating force. That this self-originating power does not belong to matter, may be shown by any one of the examples adduced by Mill to show that it does belong to it. Take the "presence of a gravitating body." Do the atoms themselves independently exert a power which inheres in them? Mill's argument requires that each atom in the universe pull every other with a steady and eternal pull. If that be so, and the power reside in the atom, then the atom is possessed of creative power, or has an infinite store of power in it to begin with, or must ultimately fail in its work. On either of the first two suppositions the atom, "which no man hath seen nor can see," becomes itself omnipotent and takes the place of the invisible, eternal, Almighty God, with this fatal logical objection resting against it, that it flagrantly violates the principle of sufficient reason by the assumption of an infinite number of omnipotent beings where only one is

needed. On the third hypothesis the grand atomic machine is running down, and Mill's doctrine of the conservation of force is annihilated. (Newton and the scientific minds of the grander order have, therefore, always had the good sense to see that gravity as a force does not inhere in matter, but that it is a force exerted upon matter by some power controlled by the most accurate mathematical thought and the most far-reaching and beneficent purpose.) In short, in the view of the best scientists, matter is only moved from without, and its essential property is *inertia*. This scientific truth, as involved in Newton's first Law of Motion, has never been in the slightest degree invalidated. While mind is consciously self-active, self-moving, matter is demonstrably inert—not self-moving, but moved.

Mill attempts to rid his argument from all hindrance arising from this fact by dexterously ignoring it, and putting his "Must be so, we know," in the place of it. The force "of which volition disposes" is put into it from outside. The will, as *the disposer* of the force, is thus furtively pushed out, and there is nothing left for consideration but "the force which volition *disposes of*." After all, then, Mill cannot avoid the covert assumption of a *disposing power*. Exceedingly comforting doubtless it is, at first blush, to a clown or to the prince of lazy men, to reflect that the chemical action in the cells in Milton's brain drove his pen and created "Paradise Lost," his so-called soul with his will-force being of no account; but the question might possibly be raised, by a little reflection, Why does not my brain, with its six hundred million cells and its equivalent of chemical action, produce its "Paradise Lost"? Seriously, it is no great logical feat for the prince of logicians to leave out the power which distinguishes man from a clod, and then say to his admirers, "See, man is only a clod;" or, "See, will is nothing more than the working of the firm of Carbon & Co."

But this turn of thought brings him face to face with the subject of free-will, the vexed question "whether volition is self-determining or determined by causes." What can he do? Ignore its existence? A distinguished American professor of theology used to say to his students, "Young men, follow the

truth if it carries you over Niagara." Possibly it should have occurred to him that the truth is not quite likely to carry men over a Niagara; so that it is well to pause in sight of the precipice and inquire whether we are following the truth. Mr. Mill finds himself on the brink of the Niagara of *automatism*. Will he inquire whether it is truth that has brought him to it? Not he. He is too brave. He clasps his deadly error to his philosophic bosom, and calmly tells us that shooting the cataract is not a thing to be considered just here. His words are: "To the question now in hand it is only the effects of volition that are relevant, not its origin." Now from all this consummate folly we confidently appeal to the common-sense of mankind, and affirm that all the reckless and false assertions and assumptions, and all the plausible but flimsy arguments of all the princely logicians in the world will weigh no more, in the scale of exact thought, against the clear, positive knowledge which every man has of his own freedom, self-activity, and power of originating action, than would a feather cast in the balance against the solar system.

After another effort or two he settles down upon the old assumption that if will is free and volition uncaused, matter and its properties are also uncaused and eternal. That ends the controversy. The sum of the argument is: "Must be so, I know."

3. *Mill's third point.*—Mind itself requires only Force and Evolution to originate it.

In replying to the proposition that "It is self-evident that nothing can have produced Mind but Mind," (1.) Mill pronounces it unscientific and absurd, and (2.) Affirms that mind needs only material agencies to produce it.

(1.) If only mind originates mind, the alternative lies between an infinite series of finite minds, and one Infinite and Eternal Mind as First Cause. The first is untenable for the twofold reason that it does not satisfy the principle of causality, and that it has been shown to be at variance with historic facts. Mill objects to the second on the ground that, while matter and force are eternal, we have no knowledge of an Eternal Mind. The value of this conclusion from his infinite "Ignoramus" has already been seen.

(2.) The final effort of Mr. Mill is directed to the task of ridding the universe of an Eternal Mind, by accounting for the existence of mind by matter and force. The argument is again remanded to the region of experience, which term is here covertly used in the third sense, or for experience plus all the logical feats of the "bubble companies." The great logician proceeds to dissect and expose the fallacy of the assumption, that "it is self-evident that only mind can produce mind." He finds at the basis of the assumption the notion "that no causes can give rise to products of a more precious or elevated kind than themselves." Now no man of sound sense, be he scientist or theologian, would for one moment accept Mill's perversion of the principle of causation as a basis for argument. The master of logic, however, proceeds to show that this principle, in this perverted form of statement, is at variance with the known analogies of nature. In showing this, he finally rests the case against a First Cause on three logical supports.

The first is an illustration of a general fact drawn from nature, and contradicting the principle that lower cannot produce higher. We give him the benefit of his own form of statement:

"How vastly nobler and more precious, for instance, are the higher vegetables and animals than the soil and manure out of which and by the properties of which they are raised up!"

So plants and animals and man are nothing but "soil and manure"! What of vegetable life, animal life, rational life, and all the rest? The lion's skin lifts and we see—evolution!

The second support is evolution pure and simple. All higher has come from the lower:

"The tendency of all recent speculation is towards the opinion that the development of inferior orders of existence into superior, the substitution of greater elaboration and higher organization for lower, is the general rule of nature."

It has already been shown that the competent physicists unanimously reject materialistic evolution, pronouncing it a "puerile hypothesis," at variance with all true scientific conclusions. Taking only the special propositions of evolution here involved, competent scientists have demonstrated their unsci-

entific character. “*That the earliest organisms were the natural product of the interactions of ordinary organic matter and force,*” is not true. Neither observation, experiment, nor reason gives any testimony in favor of such a view. Life has been in all cases due either to antecedent life, or to a power or force from without that was not identical nor correlated with the ordinary physical forces. “*That all the forms of animal and vegetable life, including man himself, have been successively and gradually developed from the earliest and simplest organisms,*” has not a shadow of truth. Such a scheme of progression has no existence in nature. There is no evidence of it in existing forms of life; there is no indication of it in fossil remains; and there is no possibility of such a progression, even as a matter of theory, in accordance with the recognized laws of morphology.”<sup>1</sup> What then becomes of this main support of Mill’s argument for the origin of mind from matter?

The third and last support is certainly an extraordinary one for a master of logic and analysis to present. It is to serve if the others fail:

“Whether it be so or not (that is, this hypothesis of evolution), there are at least in nature a multitude of facts bearing that character, and this is sufficient for the argument.”

What facts? Those of evolution? Or, those of man as the product of “soil and manure”? Plainly, it is evolution again—evolution first, midst, and last! So we have at length found the tortoise which supports the logical elephant on which Mill’s world of atheistic ontology rests. It is *evolution! EVOLUTION! EVOLUTION!* And that is all that atheism can adduce to support its irrational assumption of the non-existence of an eternal First Cause.

No one can lay down the argument of the great destroyer of theism, after a careful study of it, without mingled feelings of humiliation and indignation—humiliation, that so many of the so-called thinking and educated men of the age should be so incapable of clear thought as to be imposed upon and moulded by such so-called thought; indignation, that men in high places, who ought to know better, are constantly assuming sub-

<sup>1</sup> Elam, “*Automatism and Evolution.*”

stantially the same views and urging them upon mankind as an addition to, or substitute for, a Christian theism. It does not fall within the range of our purpose to present the positive arguments for a First Cause or for a personal God; but we are convinced that thorough discussion and popular presentation of this branch of the evidences of Christianity is one of the great theological and practical necessities of the present age. Since the days of Kant's famous "Critique," as Ulrici remarks, arguments for the existence of God have fallen into disrepute. Since that, the wide-spread opinion of believers and unbelievers has been that the being of God does not admit of proof. Theologians have fallen in with this view, forgetting that the *proofs* of the divine existence are identical with the *reasons* for the *belief* in God, and that belief without reasons is essentially irrational and absurd. Modern theology, in so readily giving up the arguments for the divine being, not only surrenders therewith its claim to be a science, but also virtually annihilates the very faith and religion of which it is a theology<sup>1</sup>. One requisite for the return to the old faith in theism is the strong and clear presentation of the proofs that there is a God, together with a merciless exposure of the intricate sophistries of atheism and anti-theism.

DANIEL S. GREGORY.

<sup>1</sup> Ulrici, "Gott und die Natur," Introduction.

## THE AIM OF POETRY.

ONE of the first characteristics of the genuine and healthy poetic nature is, that it is rooted rather in the heart than in the head. Human-heartedness is the soil from which all its other gifts originally grow, and are continually fed. The true poet is not an eccentric creature; no mere artist, living only for art; not a dreamer or a dilettante sipping the nectar of existence, but keeping aloof from its deeper interests. He is, above all things, a man among his fellow-men, with a heart that beats in sympathy with theirs—a heart not different from theirs, only larger, more open, more sensitive, more intense. It is this peculiar depth and intensity and fineness of emotional nature which kindles his intellect and inspires it with energy. He does not feel differently from other men, but he feels more. There is a larger field of things over which his feelings range, and in which he takes vivid interest.

If, as we have been often told, sympathy is the secret of all insight, this holds especially true of poetic insight, which, more than any other, derives its power of seeing from sympathy with the object seen. There is a kinship between the poetic eye and the thing it looks on, in virtue of which it penetrates. As the German poet says:

" If the eye had not been sunny,  
How could it look upon the sun ?"

And herein lies one great distinction between the poetic and the scientific treatment of things. The scientific man must keep his feelings under stern control, lest they intrude into his researches, and color the dry light in which alone science desires to see its objects.

The poet, on the other hand—it is because his feelings inform and kindle his intellect that he sees “into the life of things.”

Some, perhaps, may recall the names of great poets, though not the greatest, who have fled habitually from human neighborhood, and dwelt apart in proud isolation. But this does not, I think, disprove the view that human-heartedness is the great background of the poet’s strength. For to the poets I speak of, their solitariness has been their misfortune, if not their fault. By some untowardness in their lot, or some derangement of their age, they have been compelled to retire into themselves, and to become lonely thinkers. If their isolation has added some intensity to their thoughts, it has at the same time narrowed the range of their vision and diminished the breadth and permanence of their influence.

II. But this wide and vivid human sympathy, though an essential condition or background of all great poetry, by no means belongs exclusively to the poet. Taking other forms, it characterizes all men who have deeply moved or greatly benefited their kind—St. Augustine and Luther, Howard, Clarkson, and Wilberforce, not less than Homer, Shakespeare, and Walter Scott.

I must therefore pass on to points more distinctive of the poet, and consider,

1. What is the object or material with which the poet deals?
2. What is the special power which he brings to bear on that object?
3. What is his true aim?—what the function which he fulfils in human society?

III. The poet’s peculiar domain has generally been said to be Beauty; and there is so much truth in this that, if a single word must be fixed on, probably none better could be found. For it is one large part of the poet’s vocation to be a witness for beauty in the world around him and in human life.

But this one word is too narrow to cover all the domain over which the poetic spirit ranges. It fits well that which attracts the poet in the face of nature, and is applicable to many forms of mental and moral excellence.

But there are other things which rightly win his regard to

which this word cannot be applied without stretching it till it becomes meaningless. Therefore I should rather say that the whole range of existence, or any part of it, when imaginatively apprehended, seized on the side of its human interest, may be transfigured into poetry.

There is nothing that exists, except things ignoble and mean, in which the true poet may not find himself at home; in the open sights of nature, in the occult secrets of science, in the “*quicquid agunt homines*” of the satirist, in men’s character and fortunes, in their actions and sufferings, their joys and their sorrows, their past history, their present experience, their future destiny—all these lie open to him who has power to enter in, and by weight of imaginative insight to possess them.

And such is the kinship between man and all that is, that, as I have elsewhere said, “whenever the soul comes vividly in contact with any fact, truth, or existence—whenever it realizes and takes them home to itself with more than common intensity—out of that meeting of the soul and its object there arises a thrill of joy, a glow of emotion; and the expression of that thrill, that glow, is poetry.” But as each age modifies in some measure men’s conceptions of existence, and brings to light new aspects of life before undreamt of, so poetry, which is the expression of these aspects, is ever changing, in sympathy with the changing consciousness of the race. A growth old as thought, but ever young, it alters its form, but renews its vitality with each succeeding age.

As to the specific organ or mental gift through which poets work, every one knows that it is imagination. But if asked what imagination is, who can tell? If we turn to the psychologists, the men who busy themselves with labelling and ticketing the mental faculties, they do not much help us.

Scattered through the poets here and there, and in some writers on æsthetic subjects, notably in the works of Mr. Ruskin, we find thoughts which are more suggestive. Perhaps it is a thing to rejoice in, that this marvellous faculty has hitherto baffled the analysts. For it would seem that when you have analyzed any vital entity down to its last elements, you have done your best to destroy it.

I may, however, observe, in passing, that the following seem to be some of the most prominent notes of the way in which imagination seems to work:

1. To a man's ordinary conceptions of things, imagination adds force, clearness, distinctness of outline, vividness of coloring.

2. Again, it seems to be a power that lies intermediate between intellect and emotion, looking both ways, and partaking of the nature of each. In its highest form it would seem to be based on "moral intensity." The emotional and the intellectual in it act and react on each other, deep emotion kindling imagination, and expressing itself in imaginative forms, and imaginative insight kindling a deepening emotion.

3. Closely connected with this is what some have called the penetrative, others the interpretative, power of imagination. It is that subtle and mysterious gift, that intense intuition, which, piercing beneath all surface appearance, goes straight to the core of an object, enters where reasoning and pedling analysis are at fault, lays hold of the inner heart, the essential life of a scene, a character, a situation, and expresses it in a few immortal words. What is the secret of this penetrative glance, who shall say? It defies analysis. Neither the poet himself, who puts it forth, nor the critic who examines the result, can explain how it works—can lay his finger on the vital source of it. A line, a word, has flashed the scene upon us, has made the character live before us—how we know not, only the thing is done. And others when they see it exclaim: "How true to nature this is! So like what I have often felt myself, only I could never express it." But the poet has expressed it, and this is what makes him an interpreter to men of their own unuttered experience. All great poets are full of this power. It is that by which Shakespeare read the inmost heart of man, Wordsworth of nature.

4. A fourth note of imagination is that combining and harmonizing power by which the poetic mind, guided by the eternal forms of beauty which inhabit it, out of a mass of incongruous materials drops those which are accidental and irrelevant, and selects those which suit its purpose, those which bring out a given scene or character, and combines them into a harmonious whole.

5. The last note I shall mention is what may be called the shaping or embodying power of imagination—I mean the power of clothing intellectual and spiritual conceptions in appropriate sensible forms. This is that Shakespeare speaks of :

“ Imagination bodies forth  
The forms of things unknown,”

There is also in imagination a power which works conversely, spiritualizing what is visible and corporeal, and filling it with a higher meaning than mere understanding dreams of. These two processes are seen at work in all great poets, the one or the other being stronger, according to the predominating bent of each poet's nature.

V. While imagination, working in these and other ways, is the poet's peculiar endowment, it is clear that, for its beneficent operation, there must be present an ample range, a large store of material on which to work. This it cannot create for itself. From other regions it must be gathered: from a wealth of mind in the poet himself, from large experience of life and intimate knowledge of nature; from the exercise of his heart, his judgment, his reflection, indeed of his whole being, on all he has seen and felt. In fact, a great poet must be a man made wise by large experience, much feeling, and deep reflection; above all, he must have a hold of the great central truth of things. When these many conditions are present, then, and then only, can his imagination work widely, benignly, and for all time; then only can the poet become a “ serene creator of immortal things.”

Imagination then, we see, is not, as has sometimes been conceived, a faculty of falsehood or deception, nor of merely fictitious and fantastic views. It is permanently a truthful and truth-seeing faculty, perceiving subtle aspects of truth, hidden relations, far-reaching analogies, which find no entrance to us by any other inlet.

It is the power which vitalizes all knowledge, which makes the dead abstract and the dead concrete meet, and by their meeting mutually live; which suffers not truth to dwell apart in one compartment of the mind, but carries it home through our whole being—understanding, affections, will.

This vivid insight, this quick imaginative intuition, is surely accompanied by a delight in the object or truth beheld, a glow of heart, "a white heat of emotion," which is the proper condition of creation. This joy of imagination in its own vision, this thrill of delight, is one of the most exquisite moods man ever experiences. Emotion, then, we see from first to last, inseparably attends the exercise of imagination, pre-eminently in him who creates, in a lesser degree in those who enjoy his creations.

VI. In this aspect of poetry, as in some sense the immediate product of emotion some have seen its necessary weakness and its limitation. Emotion, they say, belongs to youth and must needs disappear before ripe, mature reason and reflection. Time must dull feelings, however vivid; cool down passions, however fervid. How many poets have reiterated Byron's lament that

"The early glow of thought declines in feeling's dull decay"!

How much of the poetry of all ages is filled with passionate regrets for objects

"Too early lost, too hopelessly deplored"!

No wonder, therefore, that strong men who despise sentimentality, and will not spend their lives in bemoaning the inevitable, are wont as they grow older to drop poetry of this kind, along with other youthful illusions. The truth of this cannot be gainsaid. The poetry of regret may please youth, which has buoyancy enough in itself to bear the weight of sadness not its own. But those who have learned by experience what real sorrow is, have no strength to waste on imaginary sorrow. And if all poetry were of this character, it would be true enough that it contained no refreshment for toiling, suffering men.

But, not to speak of purely objective poets, there is in the greatest of meditative poets a higher wisdom, a serener region, than that of imaginative regret. There are poets who, after having experienced and depicted the tumults of the soul, after having felt and sung the pain of unsatisfied desires, the sorrow that things "depart which never may return," have been able to retire within themselves, thence to contemplate the fever of

excitement from a higher, more permanent region, and to illuminate, as has been said, transitory emotion with "the light of a calm, infinite world." They do not ignore the heartless things that are done in the world, but they forgive them; the dark problems of existence they try not to explain, only they make you feel that there is light behind, though they cannot utter it; the discords and dissonances of life are still there, but over them all they seem to shed a reconciling spirit. This serene wisdom, this large and luminous contemplation, absorbs into itself all conflict, passion, and regret, as the all-embracing blue of heaven holds the storms and clouds that momentarily sweep over it. It is seen in the "august repose" of Sophocles, when he prepares the calm close for the troubled day of the blind and exiled Theban king. It is seen in the spirit that pervades the *Tempest*, one of Shakespeare's latest dramas, in which, to use his own words, he "takes part with his nobler reason against his fury," and rises out of conflict of passion into a region of serenity and self-control. It is seen in Milton when, amid the deep solitariness of his own blindness and forced inactivity, he is enabled to console himself with the thought,

"They also serve who only stand and wait."

It is seen in Wordsworth—him who, while feeling, as few have done, regret for a brightness gone which nothing could restore, was able to let all these experiences melt into his being and enrich it, till his soul became humanized by distress, and the thoughts that spring out of human suffering. Poetry such as this stands the wear of life, and breathes a benediction even over its decline.

VII. As to the aim which the poet sets before him, the end which poetry is meant to fulfil, what shall be said? Here the critics, ancient and modern, answer almost with one voice that the end is to give pleasure. Aristotle tells us that "it is the business of the tragic poet to give that pleasure which arises from pity and terror, through imitation." Horace gives an alternative end in his "Aut prodesse volunt, aut delectare poetæ;" and he gives the palm to those poems which combine both ends and at once elevate and please. To take one sample from the

moderns. Coleridge, in his definition of poetry, tells us that "a poem is a species of composition, opposed to science, as having intellectual pleasure for its object or end, and that its perfection is to communicate the greatest immediate pleasure from the parts, compatible with the largest sum of pleasure on the whole."

May I venture to differ from these great authorities, and to say that they seem to have mistaken that which is an inseparable accompaniment for that which is the main aim, the proper end, of poetry. The impulse to poetic composition is, I believe, in the first instance spontaneous, almost unconscious; and where the inspiration, as we call it, is deepest and most genuine, there a conscious purpose is least present. When a poet is in the true creative mood, he is for the time possessed with love and delight in the object, the truth, the vision which he sees, for its own sake—is wholly absorbed in it; the desire fitly to express what he sees and feels is his one sufficient motive, and to attain to this is itself his end and his reward. While the inspiration is at its strongest, the thought of giving pleasure to others or of winning praise for himself is weakest. The intrinsic delight in his own vision, and in the act of expressing it, keeps all extrinsic aims, for a time at least, aloof. This might perhaps be a sufficient account of the poet's aim in short lyrics and brief arrow-flights of song. But even in the richest poetic natures the inspiring heat cannot always or long be maintained at its height.

"And tasks in hours of insight willed,  
In hours of gloom must be fulfilled."

Great poets can hardly be conceived to have girded themselves to their longest, most deliberate efforts—Shakespeare to Hamlet, Milton to *Paradise Lost*—without reflecting what was to be the effect of their work on their fellow-men. It would hardly have satisfied them at such a time to have told them that their poetry would add to men's intellectual pleasures. They would not have been content with any result short of this—the assurance that their work would live to awaken those high sympathies in men in the exercise of which they themselves found their best satisfaction, and which, they well knew, enoble every one who partakes of them. To appeal to the

higher side of human nature and to strengthen it, to come to its rescue when it is overborne by worldliness and material interests, to support it by great truths set forth in their most attractive form—this is the only worthy aim, the adequate end, of all poetic endeavor.

No doubt these sympathies, once awakened, yield a delight among the purest and noblest man can know; but to minister this pleasure is not the main end which the poet sets before himself, but only a subordinate object. The true end is to awaken men to the divine side of things; to bear witness to the beauty that clothes the outer world, the nobility that lies hid, often obscured, in human souls; to call forth sympathy for neglected truths, for noble but oppressed persons, for downtrodden causes, and to make men feel that through all outward beauty and all pure inward affection God himself is addressing them. In this endeavor poetry makes common cause with all high things, with right reason and true philosophy, with man's moral intuitions and his religious aspirations. It combines its influence with all those benign tendencies which are working in the world for the melioration of man and the manifestation of the kingdom of God. It is adding from age to age its own current to those great

"tides that are flowing  
Right onward to the eternal shore."

But if it has great allies it has also powerful adversaries. The worship of wealth and all it gives, a materialistic philosophy which disbelieves in all knowledge unverifiable by the senses, luxury, empty display, worldliness, and cynicism—with these true poetry cannot dwell. In periods and in circles where these are dominant the poet is discredited, his function as a witness to high truth is denied. If tolerated at all, he is degraded into a merely ornamental personage, a sayer of pretty things, a hanger-on of society or of the great. Such is the only function which degenerate ages allow to him, and this is a function which only poets of baser metal will accept.

The truly great poets in every age have felt the nobility of their calling: that their true function is not to amuse or merely to give delight, but to be witnesses for the ideal and spiritual

side of things; to come to the help of whatever is generous and noble and true against the mighty. And though some exceptions there have been, yet it is true that the great majority of poets in all times have, according to their gifts, recognized this to be their proper aim, and fulfilled it. Therefore we say once more, in the words of one of the foremost of the brotherhood :

"Blessings be on them, and eternal praise,  
Who gave us nobler loves and nobler cares—  
The Poets, who on earth have made us heirs  
Of truth and pure delight by heavenly lays."

VIII. If these general views are true, there follow from them some practical corollaries as to our poetic judgments, which hold true for all times, which are specially applicable to this time.

1. The first of these is the need we have to cultivate an open and catholic judgment, ready to appreciate excellence in poetry and in literature, under whatever forms it comes. It might seem that there was little need to press this on cultivated and scholarly men, for is not one main end of all academic teaching to form in the mind right standards of judgment? Of course it is. But the process as often carried on is not free from hindrances. Scholars, too readily, by the very nature of their studies, become slaves to the past. Those who have spent their days in studying the master-minds of former ages naturally take from their works canons of criticism by which they try all new productions. Hence it is that when any fresh and original creation appears, which is unlike any thing the past has recognized, it is apt to fare ill before any learned tribunal. The learned and the literary are so trained to judge by precedents, that they often deal harder measure and narrower judgment to young aspirants than those who have no rules of criticism, and judge merely by their own natural instincts. Literary circles think to bind by their formal codes young and vigorous genius, whose very nature it is to defy the conventional and to achieve the unexpected. Many a time has this been seen in the history of poetry, notably at the opening of the present century. Those who then seated themselves on the high places of criticism and affected to dispense judgment,

brought their critical apparatus, derived from the age of Pope, to bear on the vigorous race of young poets who appeared in England after the French Revolution. Jeffrey and his band of critics tried by their narrow rules the new poetic brotherhood one by one, found them wanting, and consigned them to oblivion. Hardly more generous were the critics of the *Quarterly Review*. There was not one of the great original spirits of that time whom one or other of those schools of critics did not attempt to crush. The poets sang on, each in his own way, heedless of the anathemas. The world has long since recognized them and crowned them with honor. The critics and the canons by which they condemned the young poets—where is their authority now?

Even more to be deprecated than critics, judging by the past, are coteries which test all things by some sudden sentiment or short-lived fashion of the hour. Those who have lived some time have seen school after school of this sort arise, air its little nostrums for a season, and disappear. But such coteries, while they last do their best, by narrowness and intolerance, to vitiate literature, and are unfair alike to past eminence and to rising genius. I can myself remember a time when the subjective school of poetry was so dominant in Oxford, that some of its ablest disciples voted Walter Scott to be no poet. Perhaps there may be some who think so still.

To guard us against all such narrowness, it is well to remember that the world of poetry is wide—as wide as existence; that no experience of the past can lay down rules for future originality, or limit the materials which fresh minds may vivify, or predict the moulds in which they may cast their creations. Let those who would preserve catholicity of judgment purge their minds of all formulas and fashions, and look with open heart and ingenuous eye alike on the boundless range of past excellence or the hardly less boundless field of future possibility. It is well to have our rules of judgment few, simple, and elastic, founded only on what is permanent in nature and in man.

2. Again, in universities and other learned societies, men's thoughts are turned—and rightly—to the great world-poets of all time, to Homer, Æschylus, Sophocles, Virgil—perhaps to Dante, Shakespeare, Milton. For the whole host of

lesser, though still genuine, poets, much more for the sources whence all poetry comes, such academic persons are apt to have but scanty regard. It is well, perhaps, that for a short time, as students, we should so concentrate our gaze; for we thus get a standard of what is noblest in thought and most perfect in expression. But this exclusiveness should continue but a little while, and for a special purpose. If it be prolonged into life, if we continue only to admire and enjoy a few poets of the greatest name, we become, while fancying ourselves to be large-minded, narrow and artificial. If our eyes were always fixed on the highest mountain-peaks, what should we know of the broad earth around us? What should we think of the geographer who should acquaint himself with the rivers, only where they broaden seaward and bear navies on their bosom, and know nothing of the small affluents and brooks that run among the hills and feed the rivers, and of the mountain wells that feed the brooks, and of the clouds and vapors that supply the wells. You admire Homer, Æschylus, Shakespeare, perhaps Scott and Wordsworth and Shelley; but where did these get their inspiration, and the materials which they wrought into beauty? Not mainly by study of books, not by placing before themselves literary models, but by going straight to the true sources of all poetry—by knowing and loving nature, by acquaintance with their own hearts, and by knowledge of their fellow-men.

From the poetry of the people has been drawn most of what is truest, most human-hearted, in the greatest poems. Would the Iliad have been possible if there had not existed before it a nameless crowd of rhapsodists, who wrought out a poetic language, and shaped the deeds of the heroes into rough, popular songs? Would Shakespeare have been possible if he had not wrought on a soil overstrewn with the wreck of mediæval mysteries, moralities, tales, ballads; with the chronicles and traditions of England, as well as the regular plays of his predecessors? When Shakespeare's "study of imagination" was filled with kings and heroes and statesmen such as he had never met with, how was it that he so painted them to the life? Was not his insight into their characters, his reading of their feelings, drawn from the power in him of imagination and memory,

working on the scenes he had witnessed, the impressions he had gathered, first in the hamlets, and in the oak woods about his own Stratford, and then on what he afterwards saw of city life? His own experience, not of books, but of men, was idealized and projected into the strange and distant, till that became alive and near.

No doubt a time comes with advancing civilization when the poets of the past must exercise more power over younger poets than in early times. But this at least remains true, that, if the poetry of any, even the most advanced age, is to retain that eternal freshness which is its finest grace, it must draw both its materials and its impulses more from sympathy with the people than from past poets, more from the breast of man than from books. If poetry is to portray true emotion, this must come from having ourselves felt it and seen others feel it.

Those who are familiar with the poor, know how much of that feeling language which is the essence of poetry may be heard at times under cottage roofs. At the fall of autumn I have visited and said farewell to two old Highland women, sisters, sitting in their smoky hut beside their scanty peat fire. With return of summer I have revisited that hut and found one sitting there alone, and have heard that sole survivor, as she sat on her stool, rocking her body to and fro, pour forth in Gaelic speech the story how her sister pined away, and left her, in the dead days of winter, all alone. And no threnody or lament poet ever penned could match the pathos of that simple narrative.

In cases like this, not the feeling only is poetic—the words which utter it are so too. And the poet, instead of adopting the approved diction of poets, or coining tropes and images of his own, cannot do better than adopt the language of genuine emotion as it comes warm from the lips of suffering men and women. And not the language only, but the incidents of actual life, are worth more as a storehouse of fresh poetry than all the written poems of all the literatures. Here more than elsewhere that saying holds, that the literary language is a stagnant pool; the words men use under pressure of real emotion are the running stream, the living spring.

3. But it is not nature and human life only as they exist

now, but also as we know them to have been in the past, that furnish ever fresh poetic materials. It has often been a marvel to me that English poets, with their own grand national history behind them, have made so little use of it.

Since Shakespeare wrote his historical dramas, how few poetic blocks have been dug from that quarry? What I now say applies to England especially, rather than to Scotland. Our picturesque historians of recent years, while they have done the work of partisans very effectively, have also been in some sort poets of the past. But how seldom have our regular singers set forth on that field! The Laureate, no doubt, after having done his work in England's mythic region, has, late in his career, descended from those shadowy heights to the more solid ground and more substantial figures of her recorded history. Let us hail the omen, and hope that the coming generation of poets may follow him, and enter into the rich world of England's history and possess it.

Surely this land, if any other, supplies the material in her long unbroken story, her heroic names, her battle-fields scattered all over the island, where railways and factories have not obliterated them;

“the halls in which are hung  
Armory of the invincible knights of old;”

where hang; too, the portraits of famous men, the homes in which they were reared, either still inhabited, or mouldering,

“In all the imploring beauty of decay;”

—these things remain to add life and color to that which chronicle and tradition and family histories have preserved. How is it that our English poets have so turned their back on all that? I confess it has often pained me to see fine poetic faculty expended on a poem, long as *Paradise Lost*, about some demigod or hero of Greece, in whom the Teutonic mind can never find more than a passing interest; or in discussing hard problems of psychology, better left to the philosophers; or in cutting the inner man to shreds in morbid self-analysis, while the great fresh fields of our own history lie all unvisited.

4. One word as to the relation which substance bears to form, thought to expression, in poetry.

"Lively feeling for a situation, and power to express it, constitute the poet," said Goethe. "The power of clear and eloquent expression is a talent distinct from poetry, though often mistaken for it," says Dr. Newman. Into this large question, whether he can be called a poet who lacks the power of expressing the poetic thought that is in him, I shall not enter. On the one hand you have Goethe and Coleridge maintaining that poetic conception and expression are inseparable—powers born in one birth. On the other hand, Wordsworth and Dr. Newman agree in holding that

"Many are the poets sown by Nature,  
Yet wanting the accomplishment of verse."

As, however, the "vision," even if it exist, cannot reveal itself to others without the "accomplishment" of expression, there is little need further to discuss the question. But while both of these powers are indispensable, they seem to exist in various proportions in different poets. One poet is strong in thought and substance, less effective in form and expression. In another the case is exactly reversed. It is only in the greatest poets, and in those when in their happiest mood, that the two powers are seen in perfect equipoise—that is, that we find the highest thoughts wedded to the most perfect words. Among well-known poets, Cowper and Scott have been noted as stronger in substance than in form; Pope and Gray as poets in whom finish of style exceeds power of thought; Moore as hiding commonplace sentiment under elaborate ornament. On the whole, it may be said that the early poets of any nation are for the most part stronger in substance than in style; whereas, as time goes on, power of expression grows, style gets cultivated for its own sake, so that in later poets expression very often outruns thought.

As an illustration of the wide limits within which two styles of expression, each perfect after its kind, may range, take two poems, well known to every one—Wordsworth's "Resolution and Independence," and Tennyson's "Palace of Art." Each poem well represents the manner of its author. In one thing only they agree—that each contains a moral truth, though to teach this is not probably the main object of either. In all

other respects—their manner of conveying the truth, the form, coloring, style of diction—no two poems could well be more unlike.

Wordsworth's poem sets forth the alternation of two opposite moods, to which imaginative natures are exposed—the highest exaltation and rejoicing in sympathy with the joy of Nature, quickly succeeded by the deepest despondency. These two moods powerfully depicted, admonition and restoration come from the sight of a hard lot patiently, even cheerfully, borne by a poor leech-gatherer, who wanders about the moors, plying his trade. This sight acts as a tonic on the poet's spirit, bracing him to fortitude and content.

The early poem of the Laureate begins by personifying the Spirit of Art, who speaks forth her own aims and desires, her own purpose to enjoy beauty always and only by herself, for her own selfish enjoyment, the artistic temptation to worship beauty apart from truth and goodness. Every one remembers how she describes the palace, so royal rich and wide, with which she surrounded herself, the life she led there; then, after a time, how, smitten to the core with sense of her own inward poverty and misery, she loathes herself in despair.

Wordsworth's "plain imagination and severe" moves rapidly from the most literal everyday commonplace into the remotest distance of brooding phantasy, before which the old man and the plain visible scene entirely disappear, or are transfigured. And the diction moves with the thought, passing from the barest prose to the most elevated poetic style. Thus, if on the one hand you have such lines as

"To me that morning did it happen so,"

and

"How is it that you live, and what is it you do?"

you have, on the other,

"I thought of Chatterton, the marvellous boy,  
The sleepless soul that perished in his pride;  
Of him who walked in glory and in joy,  
Following his plough, along the mountain side:  
We poets in our youth begin in gladness;  
But thereof comes in the end despondency and madness."

You have also the strong lines, likening the sudden apparition of the old man on the moor to a huge boulder stone,

" Couched on the bald top of an eminence ;"

then to a sea beast that has crawled forth on a sandbank or rock-ledge, to sun itself. Then rising into—

" Upon the margin of that moorish flood,  
Motionless as a cloud, the old man stood ;  
That heareth not the loud winds when they call ;  
And moveth all together, if it move at all."

Many may object to the appearance of the bald lines in the poem as blemishes. To me, while they give great reality to the whole, they enhance, I know not how much, the power of the grander lines. I would not, if I could, have them otherwise.

Mr. Tennyson again from end to end of his poem pitches the style at a high artistic level, from which he never once descends. Image comes on image, picture succeeds picture, each perfect, rich in color, clear in outline. When you first read the poem, every stanza almost startles you as with a new and brilliant surprise. There is not a line which the most fastidious could wish away.

In another thing the two poems are strikingly contrasted. Wordsworth's is almost colorless : there is only a word or two in it that can suggest color. Mr. Tennyson's is inlaid throughout with the richest hues, yet so deftly as not to satiate, but only to bring out more fully the purpose of the poem. In reading the one you feel as though you were in the midst of a plain, bare moor, out of which the precipiced crags and blue mountain peaks soar suddenly, yet not inharmoniously, all the more impressive from the dead level that surrounds them. In the other you are, as it were, walking along some high mountain level, without marked elevation or depression anywhere, but yielding on either side wide outlooks over land and sea.

I have alluded to these two poems, not by any means to make estimate of their excellence, but as instances in which two great poets give expression to high thoughts, each in his own characteristic style, and that style perfect according to its kind and aim.

In these two instances the idea and the expression are well

balanced, in perfect equipoise. But it is otherwise with much of the poetry, or attempts at poetry, of the present time. A tincture of letters is now so common, that the number of those who can versify is greatly increased; but the power of expression often lamentably outruns the thought. The opposite of this is sometimes seen—strong thought with little skill to utter it—an instance of which will occur to every one in the case of one of the most prominent living poets, in whom the power of lucid utterance halts breathlessly and painfully behind the jerks and jolts of his subtle and eccentric thought. But this is not a common fault. Rather, I should say, we are overdone with superabundant imagery and luscious melody. We are so cloyed with the perfume of flowers, that we long for the bare bracing heights where only stern north winds blow. Or, to put it otherwise, in many modern poems you are presented with a richly chased casket; you open it, and find only a common pebble within. This is a malady incident to periods of late civilization and of much criticism. Poetry gets narrowed into an art—an art which many can practise, but which, when practised is not worth much. How many are there in the present day of more or less poetical faculty, who can express admirably whatever they have to say, but that amounts to little or nothing. At best it is but a collection of poetic prettinesses, sometimes of hysterical exaggerations and extravagances.

Had these men, with their fine faculty of expression, only made themselves seriously at home in any one field of thought; if they had ever learned to love any subject for its own sake, and not merely for its artistic capabilities, if they had ever laid a strong heart-hold of any side of human interest, no one can say what they might not have achieved. But for want of this grasp of substance the result is in so many cases what we see. Not by manipulating phrases, and fiddling at expression—not indeed unless some great stirring of the stagnant waters be vouchsafed, some new awakening to the higher side of things—not till some mighty wind blows over the souls of men will another epoch of great and creative poetry once more arise.

5. The views which I have here set forth will, if they are true, determine what value we ought to place on that modern theory which maintains “the moral indifference of true art.”

The great poet, we are sometimes nowadays told, must be free from all moral prepossessions: his one business is "to see life steadily, and see it whole," and to represent it faithfully as it is. The highest office of the poet is "to aim at a purely artistic effect." To him goodness and vice are alike—his work is to delineate each impartially, and let no shade of preference appear.

It is to dramatic poetry, I suppose, that this theory is mainly intended to apply, and from the drama it is supposed to receive most confirmation. Be it so. It is then the aim of the dramatist to delineate truly character of every hue, the base equally with the noble; to represent life in all its variety, just as it is. But is not life itself full of morality? Is not the substance and texture of it moral to the core? Must not the contemplation of human characters as they are, awaken liking or dislike, moral admiration or moral aversion, in every healthy mind? And must not the poetry which represents truly that substance be moral too? Must not the spectacle of the characters depicted stir natural feelings of love or dislike, as well in the poet who draws, as in the reader who contemplates them? Did not Sophocles have more complacence in Antigone than in Ismene? Did not Shakespeare admire and love Desdemona and Cordelia, hate and despise Iago and Edmund?

This theory of the moral indifference of art originated, I believe, in great measure with Goethe, and has been propagated by his too exclusive admirers. I should be content to rest the whole question on a comparison of the moral spirit that pervades the dramas of Goethe and those of Shakespeare.

It has been asserted,<sup>1</sup> I believe with truth, that it was the existence of this very theory in Goethe, or rather of that element in him which projected this theory, that shut him out from the highest place as a dramatist, and marks the vast interval between him and Shakespeare. Goethe, whose moral nature was, as has been said, of a somewhat limp texture, having few strong "natural admirations," is in his dramas wanting in those moral lights and shadows that exist in the actual world, and give life and outline to all strong natures. And so in his groups of characters most of them are morally

<sup>1</sup> See R. H. Hutton's *Essay on Goethe*.

feeble and shadowy. Shakespeare, on the other hand, being a whole natural man, "the moral, imaginative, and intellectual parts of him did not lie separate,"<sup>1</sup> but move at once and all together. Being wholly unembarrassed with æsthetic theories, "his poetical impulse and his moral feelings were one." He did not conceal or explain away the great moral elevations and depressions that you see in the world. He painted men and women as they are—with great moral differences, not withholding admiration from the noble, contempt and aversion from the base. Therefore, without saying that he is faultless, without denying that there are things in him we could wish away, yet, taken as a whole, the spirit that breathes from his works is natural, healthy, bracing, elevating, in a way Goethe's works are not. Every side and phase of human nature is there faithfully set down, but to the higher and better side is given its own natural predominance. With the largest tolerance ever man had for all human infirmity, the widest sympathy with all men, seeing even the soul of good that may lie in things evil, there is in him nothing of that neutral moral tint which is weakness in poetry as truly as in actual life.

Neither do we find in this master-dramatist any trace of another theory born of morbid physiology as the former of morbid æsthetics, by which character, personality, the soul, are explained away, and all moral energy disappears before such solvents as outward circumstances, antecedent conditions, heredity, and accumulated instincts. Shakespeare had looked that way too, as he had most ways; but he leaves the announcement of this modern view, or one closely allied to it, to Edmund, one of his basest characters, and even he scorns it.

If the divorce of poetry from morality will not hold in the drama, in which alone it can show any semblance of argument, far less can it be applied to poetry in its other forms—epic, lyric, meditative. If it be not the function of poetry in these forms to give beautiful expression to the finer impulses, to the higher side of life, I see not that it has any function at all. If poetry be not a river, fed from the high clear wells that spring on the topmost summits of life, but only a canal to drain off

<sup>1</sup> See Gervinus' Shakespeare.

stagnant ditches from the flats, it may be a very useful sanitary contrivance, but has not, in Bacon's words, any "participation of divineness."

Poets who do not recognize the highest moral ideal known to man, do, by that very act, cut themselves off from the highest artistic effect. It is another exemplification of that great law of ethics which compasses all human action, "whereby the abandonment of a lower end in obedience to a higher aim is made the very condition of securing the lower one." For just as the pleasure-seeker is not the pleasure-finder, so he that aims only at artistic effect, by that very act misses it. To reach the highest art we must forget art and aim beyond it. Other gifts being equal, the poet who has been enabled to apprehend the highest moral conception has, in that, gained for himself a great poetic vantage-ground.

To bring this to a point—the Christian standard, we say, is the highest known among men. Must then, you may ask, all great poets, at least in modern times, in order to reach the highest poetic excellence, be Christians? Goethe, you say, made little of Christianity; Shelley abjured it. Are we, on that account, to deny that they rank among the great poets of the world? To this it may be replied, first, that though they did not consciously hold it, they could not escape, at least, some unconscious influence from the religion that surrounded them. Secondly, that had their prejudice against Christianity been removed, could they have frankly owned its divinity, instead of being losers, they would have gained hardly less as poets than as men. For lack of this it is that there lie hidden in the human spirit tones, the truest, the most tender, the most profound, which these poets have never elicited.

Let it not be said that I have been advocating sectarian views, trying to bind poetry to the service of a sect. It is true that it refuses to be made over as the handmaid of any one philosophy, or view of life, or system of belief. But it is equally true that it naturally allies itself only with what is highest and best in human nature, and in whatever philosophy or belief that is enshrined, thence poetry will draw its finest impulses. There are only two views with which it has nothing in common. One is the practical view of life, whose motto is

*nil admirari.* With this it can have no fellowship, for it cuts off the springs of emotion at their very sources. The other antipode is that philosophy which denies to us any access to truth except through the senses; which refuses to believe any thing which scalpel or crucible or microscope cannot verify; which reduces human nature to a heap of finely granulated iridescent dust, and empties man of a soul and the universe of a God. Such a philosophy would leave to poetry only one function—to deck with tinsel the coffin of universal humanity. This is a function which she declines to perform. But we need have no fears that it will come to this. Poetry will not succumb before materialism or agnosticism, or any other cobweb of the sophisticated brain. It is an older, stronger birth than these and will survive them. It will throw itself out into fresh forms, will dig for itself new channels; but, under some form suited to each age, it will continue through all time, for it is an undying effluence of the soul of man.

That that effluence has, on the whole, been benign in its tendency, who can doubt? I have wished throughout not to indulge in exaggeration, nor to claim for poetry more than every one must concede to it. Imagination may be turned to evil uses. It may minister, it has sometimes ministered, to the baser side of human nature, has thrown enchantment over things that are vile. But this has been a perversion which depraves the nature of poetry and robs it of its finest grace. Naturally, it is the ally of all things high and pure; among these its home is; its nature is to lay hold of these and bring them, with power and attractiveness, to our hearts. It is the prerogative of poetry to convey to us, as nothing else can, the beauty that is in all nature, to interpret the finer quality that is hidden in the hearts of men, and to hint at a beauty which lies behind these, a light "above the light of setting suns," which is incommunicable. In doing this it will fulfil now, as of old, the office which Bacon assigned to it, and will give some "shadow of satisfaction to the spirit of man, longing for a more ample greatness, a more perfect goodness, and a more absolute variety" than here it is capable of.

J. C. SHAIRP.

## THE FOUNDATIONS OF CHANCE.

EVERY traveller along the Riviera coast of the Mediterranean is more or less familiar with Monaco, perhaps the most lovely spot along the whole of that lovely sea-coast. He knows something too of its moral reputation, and of the sources from which a certain income is derived there. What may be the annual value of that income, few are in a position to say; but guesses are rife upon the subject, and those guesses run up to a good many millions of francs. One fact, however, is obvious about it, viz., that it subdivides easily into three handsome, not to say splendid, fortunes. There is firstly the by no means minute revenue, or rent, of the sovereign prince of that minute state; there is secondly the revenue, or earnings, of the lessee, M. Blanc, or his company, whatever the nature of that company may be; and there is thirdly the expenditure demanded for keeping up the Casino and its gardens in their present magnificent style. Of this last, one item alone consists of the band, reckoned by most judges to be about the best in Europe. It numbers some seventy performers, retained the whole year round, and its cost may be estimated at somewhere between fifty and one hundred thousand dollars. The total which results from the addition of these three incomes may therefore be taken for granted as amounting to something considerable.

When we inquire into the details of the process by which this aggregate income is earned, we find them to be, in one sense, simplicity itself. You go into a large room and you see a crowd of people standing and sitting round a table, earnestly watching a roulette, or in plainer English, a big teetotum, which is set spinning from time to time in the middle. Their

loss and gain depend simply on what number happens to turn up upon it. At another table the spectators and participants are watching the drawing of cards from a pack; what they gain or lose depends simply on the number of pips in the cards which are drawn. The same proceedings are repeated in the other rooms, and are continued with more or less vigor the whole year round. That is to say, the processes performed are those which, in the common sense of the word, depend entirely upon "chance." It is chance, pure and simple, without admixture of fraud on the part of the conductors, or skill on the part of the public. No imputation of any kind of unfairness seems ever to be brought against the managers, even by the most desperate or despondent of the ruined. It is fate, or some such impersonal agent, not M. Blanc, that they abuse when they find themselves reduced to their last five-franc piece. There is, moreover, no opening for skill or acuteness on the part of the players, whatever they may persuade themselves on this subject, on which we shall have something to say in the course of this article. No more typical instance of the nature and working of "chance" could easily be chosen.

Now, passing over all moral and other similar reflections, what we want to call the reader's attention to here is the *certainty* which is to be found pervading the whole transaction. The word "certainty" will sound strange in many ears, in this conjunction; and a good deal of discussion and explanation may have to be expended before its exact nature and its limits are made clear to those who have not hitherto thought upon the subject. But that the certainty exists will be made plain by a moment's consideration. This gambling concern is just as "sound" and steady a business, to its promoters at least, as that of any old-established commercial or manufacturing firm. Indeed, we might fairly say that it is much more steady than the great majority of houses. It stands in no danger of a panic or run, as every bank must necessarily do; it fears no probable change of taste, and consequent falling off of the demand for that which it furnishes. Whilst human nature in general remains what it now is, and so long as the neighboring states do not interfere to check its proceedings as mischievous, it may fairly look upon an income as safe, and, what is more to the

point, as steady, as the soberest of business men in the most old-fashioned of cities could reasonably desire.

It will naturally be asked, What are the conditions upon which this certainty and security of anticipation depend? We would lead up to the reply to this question by asking another; on what conditions does certainty depend in any other department of thought and practice? The answer must be, simply and entirely, on *regularity* in the phenomena; on *law*, as it is commonly expressed. Where regularity can be traced among phenomena, there can inferences be drawn: where no regularity can be detected, there we have nothing before us but guess-work. Regularity on the part of the phenomena, and potential certainty about them on our part, are absolutely coextensive and correspondent. We need not pause to define what we here mean by regularity, since every one has a sufficient rough conception of it for our present purpose. We may, however, just point out, that within the sphere of ordinary reasoning it presents itself in practice in two different ways. Sometimes we find two instances or groups of phenomena which resemble one another so closely in their details, that we may reason directly from one to the other. Here we are said to employ Induction. For instance, a man performs a chemical experiment. He mixes a certain proportion of oxygen and hydrogen in a vessel, and then sets fire to it. The result is an explosion, and the production of a certain quantity of water. Here we know that we can do the same thing over again; that is, that we can reproduce precisely the same group of phenomena whenever we please. Hence we feel perfect confidence that the same result as before will follow. But there are a great many cases in which we never have an opportunity of finding any thing approaching to the same precise group of phenomena occurring even twice over, and therefore we are not able to argue from the similarity of one to the other. Take for instance an eclipse of the sun. The entire history of our race on earth would not furnish range enough for the occurrence of even two eclipses which could be considered "alike" according to the standard of precision demanded by modern astronomy. No doubt we may express our conception of uniformity here in a hypothetical form, and say that *if* two cases occurred in which the sun and moon and earth

occupied exactly the same relative positions, we should experience an eclipse of the same approach to totality prevailing over the same area of the earth's surface. And there is no harm in illustrating, as is often done in works on inductive logic, our conception of the uniformity of nature by such an imaginary case. But such cases do not occur, and therefore we do not argue directly from similar examples. As almost every one knows, the astronomer starts from certain broad generalizations, first established by Newton, and deduces his conclusion by a train of reasoning from these. That is, he argues deductively.

The above examples are not of course intended as a philosophical account of the distinction between induction and deduction, but they will serve to indicate to the reader, in a general way, the distinction between the two classes of cases in which these modes of reasoning are employed. Now when we come to questions of chance, both of these modes, in their commonly understood application, fail entirely. In the first place, we can never find two cases alike. In such a simple instance as that of the tossing of a coin: no doubt, if we held it twice successively in rigidly the same position, and projected it with precisely the same velocity of rotation and translation, it would always yield the same face. But this cannot be done; if it could, coins would not be tossed any more to decide questions of choice. Nor have we, again, any generalizations which are known to be trustworthy in every case, and to which, therefore, appeal can be confidently made. No doubt there *are* such, lying deep down under the phenomena, but their applications and developments are so infinitely complex that they can never be appealed to. Here again we may say that if they could be determined and employed, all occasion for them would at once cease, at least as regards games of chance; for, when both sides could anticipate the result with certainty, one side would at once see its disadvantage, and decline the game or pursuit.

What, then, exactly is the uniformity or regularity which pervades the region of chance? for, as we have already seen, enormous fortunes are steadily earned by safe prevision in this region, and trustworthy prevision must necessarily be built upon the foundation of objective regularity. This will need a

little discussion, for the clear and adequate appreciation of this kind of uniformity may be regarded as the great logical achievement of modern times. It is like the discovery of a new continent, since it is not merely the extension of old methods over adjacent territories, but rather the discovery of a new method. It is the acquisition, for purposes of inference, of a region where no possibility of inference was formerly known to exist. This new conception is, in a word, that of *average regularity*—of regularity in the long-run combined with perfect irregularity in the details. Take the throw of a die. No human being knows, or is ever likely to know, what number will turn up on any specified occasion. From knowledge of such details we are as absolutely debarred as we are from knowledge of the nature of the country at any specified point on the hinder side of the moon's surface. But here comes in a difference: whereas in the latter case the uncertainty of detail develops into no kind of aggregate certainty (for we are just as much in the dark about the nature of the whole surface as about that of any part of it) in the latter case, when we begin to extend our observation, a very striking and important kind of regularity begins to emerge. Take a score of throws of the die, and we are not quite as uncertain as we were about one. Take a few hundreds, and the uncertainty begins to give way to tolerably strong conviction. Take a few thousands, and the chaos which might have been possibly anticipated, is seen to be replaced by a very marked order. Out of six thousand throws, we know that about one thousand will yield ace, and so with the other numbers.

This characteristic is not by any means confined to games of chance. Our only reason for thinking more of it in that connection lies in the fact that no other kind of regularity is to be found there. But the slightest observation will detect it, in some direction or other, in almost every class of phenomena. It is found in pursuits where skill and chance go together; the skill directing the general aim, and the chance showing itself in a multitude of more or less minute and incalculable disturbances. Instances of this are furnished by rifle-shooting, sextant observations, and so on; in fact, by any kind of practice or observation in which instruments have to be employed. The

single result is, within certain limits, more or less narrow, absolutely indeterminable; but when we multiply these single results we find them grouping themselves with a systematic and progressive regularity. So again with affairs which turn almost entirely upon the will and choice of man. The number of crimes such as suicides, of marriages, etc., show the same description of regularity. No one can say exactly when and where any one such event will occur, but any one who appeals to statistics can say when and where averages will occur. And to add one more class of instances, that furnished by returns of mortality. Here we have a class of cases where human will has but little causative influence, at least directly. But it is only necessary to mention this class for every one to bring into immediate mental conjunction the proverbial uncertainty of the lives of individuals and families, and the well-known certainty of the average duration of life in large towns or States.

Average regularity, then, or regularity which gradually asserts itself after many repetitions, is the thing to be expected. But in saying this we must insist upon a very needful caution. The general conditions, or broad determining forces of the phenomena in question, must remain unchanged. Every one, for instance, can see what would happen if we were to make use of a die which, after long use and consequent wear, gradually began to change its shape and become irregular. This might happen, for instance, if it were cut out of a piece of chalk which was harder on one side than the other. It is clear that we should then have to put some limit upon the length of experience wherein we were to seek our average. This would to a certain extent place us between two opposed difficulties. We must, on the one hand, from the nature and characteristics of the phenomena in question, insist upon a great many throws to give the ace its fair chance of one in six. But if, on the other hand, we go too far in this direction and admit an enormous number of throws, the tendency to obtain one in six might gradually be found to undergo a change. What is called a bias might be seen to be setting in, so that the ace would get more or less than its fair average, according to the way in which the shape of the die had undergone alteration. Just as the ultimate average could not show itself unless we went on long

enough, so it would be lost again if we were to go on too long.

In their physical application to such a thing as a die, the above remarks are obvious enough; but when we consider their corresponding application to moral and social agencies, we shall find that they are often overlooked. Statisticians are sometimes charged, and occasionally with justice, with regarding the great social forces under which men act as permanently unchangeable. Some of the determining influences are doubtless subject to little or no variation; for instance, the most fundamental characteristics of the human body and mind must be regarded as practically fixed. But others are distinctly changeable, and, what is most to the point, changeable by human agency. Mr. Buckle, for instance, in his well-known work on the History of Civilization, roused a good deal of very natural obloquy by his remarks on the regularity of the number of suicides in London. The popular and unphilosophical view used doubtless at one time to regard any trustworthy anticipations upon such matters as these as out of the question, for it well knew the mysterious and complicated links of misery or despair and of human will contending against these, through which each individual suicide was actually brought about. The statistician, however, found that this was not so; he was able to establish beyond all doubt that about the same number of such crimes was actually committed year after year. But when, by a reaction against the popular view, Buckle went on to speak as if this annual number was fixed by a sort of fate, against which all moral and religious efforts would be found in vain, he fell into a serious error. We may be baffled in our struggle with any given individual, but by a judicious alteration of their general surroundings we may succeed in making our efforts tell on the average. No really permanent average can ever be looked for where human actions are concerned. To speak metaphorically, the dice in this case change their shape but very slowly. But they do change, and therefore no predictions will hold good which refer to times or places very remote from the present.

The above caution is the more necessary owing to the fact that the pure theory of Chance contemplates an indefinite suc-

cession of events. The average with which we are in strictness concerned is not that furnished by a limited number of things, but rather that towards which we continue gradually to approach nearer and nearer, but without the certain prospect of ever actually attaining to it. The notion in fact which we have to grasp here is that of the *limit*, as the mathematician understands the term. Toss a coin fifty times, and we shall have about equal numbers of heads and tails; toss it five hundred times, and we shall have more nearly equal numbers, and so on without end.<sup>1</sup> We must not look to getting them divided exactly half and half, however long we go on; we *may* thus hit it precisely, but we are much more likely not to do so; but we can continue indefinitely to fix and perpetuate our average ratio of half and half by continued repetitions of our trials. The point now before us is one upon which it is very important to insist, for it is from inability to understand this that more than half of the most persistent blunders and misapprehensions arise upon the subject of Probability. Return for a moment to Monaco. Amongst the anxious crowds which press around those green tables there will always be seen a considerable number of persons with card and pencil in their hands, who are carefully taking notes of every number that turns up. These cards they keep by them, and study with the interest and attention of a broker perusing the stock and share lists in a

<sup>1</sup> By "more nearly" in the above sentence, we must, of course, understand *proportional*, not *actual* equality—viz., that the ratio of the one number to the other will continue more and more to approach equality. We cannot expect that the actual difference between the two numbers—namely, those of heads and tails—will go on diminishing; on the contrary, this difference may be rather expected to increase. This might be expressed by saying that the probable actual error will increase, but the probable fractional error will diminish, as the numbers with which we are concerned are increased. Or to put it into a concrete example. Toss a coin eight times, and it is about two to one that the number of heads or tails does not depart more than *one* from the half-and-half division; or, in other words, that we get either three, four, or five heads. Toss it twenty times, and it is almost exactly the same odds that the number is within *two* of the same even division; that is, that we get either eight, nine, ten, eleven, or twelve heads. Here it is obvious that the "error" or departure from the true ultimate average, which we thus expect in the latter case, is just double what it is in the former; but then the number of possible cases is more than double. Or, as we have put it, though the actual variation is probably greater, the fractional or proportional variation is probably less.

morning paper. There can be little doubt that they are confusedly arguing from the acknowledged fact that the numbers ought to occur on the average about equally often. When, therefore, they observe that one number has had during part of the day less or more than its fair chance, they at once spring to the conclusion that for some time afterwards it must have more or less, as otherwise the average would be disturbed. Doubtless they do not often state it as crudely as this, but it is quite certain that no other pretence of a rational justification could be offered of the practice of guiding our future conduct by observation of the past.<sup>1</sup>

It is sometimes said that the mistake in these cases consists in supposing that the past can affect the future. This is a very misleading form of expression, for it is perfectly obvious that in the vastly greater proportion of physical phenomena every single event intimately affects many of those which come after it. It is far better to grapple with the difficulty at once, by trying to realize the nature of a "limit" or ultimate average. If a *finite* number of trials only is granted, then it is quite true that any excess at one point must be balanced by a corresponding defect at another point. If two chess-players of equal skill contend in a match of a dozen games, and one of them begins by winning four in succession, it is clear that the other must win more than half of the remaining ones if they are to be left on equal terms at the end. But this is no longer the case when we are concerned with an indefinite or never-ending succession. Any casual disturbance, to however great an extent it may have shown itself, may be regarded with complacency, as being sure in the long-run to neutralize itself. It is like the difference between a short and a long race: in the former a good

<sup>1</sup> We assume, of course (what long experience has justified), that the tables are perfectly fair, or, at least, that any bias they have has been well determined. If we had to judge of what *will* happen solely from a short observation of what *has* happened, then no doubt we should be influenced in our expectations by the fact of our having observed a run on certain numbers. Only then this expectation would be just the reverse of that alluded to above. Instead of expecting the number which had been thus favored in the past to be less likely to occur in future, we should expect it to be more likely, for we should think that there must be something in the table which gave those numbers an unfair advantage.

start is every thing, for the spare time is scanty; but in a course of four miles who cares which crew is leading the first half mile, except as this offers an index of style? In Probability the race must be regarded as having no end, for it is the "limit" to which we look. The roulette, we say, gives red and black numbers equally often in the long-run. But if it has just given red six times running, this renders red none the less likely; for all that we can take our stand upon is the ultimate tendency of red and black to occur equally often.

We must now look at another aspect of this same question, for which games of chance will not furnish quite so suitable an illustration. Suppose we measure the height of a great many men who live under the same general conditions of country, climate, and so on. They will of course vary considerably one from another, and we should be quite unable to predict of any individual, before measurement, and within considerable limits, what his stature would be. But when we collect a large number of these heights and tabulate them, we find that they invariably show a tendency to group themselves into a certain orderly and symmetrical arrangement. Every one who has had any practical experience of measuring many natural objects belonging to the same kind is more or less aware of the general outline of this regularity. He knows that those belonging to the medium size will be much the most numerous; that those slightly and equally removed from this medium by excess and defect will be equally numerous with one another, but less numerous than those in the middle; that those more in extreme each way will be decidedly less numerous, and so on. Giants and dwarfs will be very scarce, and beyond a certain range each way no specimens whatever will be expected to occur. This general result is so commonly appreciated, that any thing widely different from it would strike us as exceptional; but what the theory of Probability and Statistics teach us is something far more definite than this. It is now known (and the merit of popularizing this is mainly due to Quetelet, the Belgian astronomer) that one and the same law of distribution of the natural objects, belonging to any one kind, about their mean or middle point, prevails almost everywhere. We will mention some of the necessary conditions presently; but, subject to these condi-

tions, the remarkable fact is established that *whatever* we measure—whether the height of men or the magnitude of any part of their bodies, the weight of fruits, etc., the distance which bullets in rifle-shooting diverge from the centre of the target, etc., etc.—in all these cases one and the same law is found to regulate the frequency of grouping about the central point. It is not merely that the greater divergencies are rarer, but that they become rarer according to a fixed invariable law.

It would be quite impossible within the scope of a single article to assign the requisite conditions for the above-mentioned remarkable result; still less to describe the mathematical deduction, and the nature of the assumptions, from which it may be inferred speculatively. But so much as this may be remarked: If it refers to natural objects, these must belong to what may be called the same natural kind or group, and be subject broadly to the same or similar influences. If, for instance, we were measuring the height of a group of men, the members of this group ought not to be drawn confusedly from amongst barbarians and civilized, those who have had a healthy development and those who have been stunted by privation, and so on. To mingle such divergent elements will spoil the symmetry of our results. So again, if the magnitudes which we propose to compare and arrange be the measured distances of the shot-marks on a target from the true centre. Here we have an artificial instead of a natural process. But under similar conditions the same law will be found to prevail. But then the target must be fired at from the same distance, by the same or like marksmen, and with similar weapons. Unless we insist on these conditions, we are mingling heterogeneous elements, and the law in question (the Law of Error, as it is technically termed) will not be found to prevail to the same extent.

The consequences of this ultimately uniform law of distribution of objects about a central point are numerous and important. There is, for one thing, the invariable consequence of uniformity wherever it shows itself—viz., the capacity of inference or prediction without specific examination of every case. Suppose 10,000 soldiers were measured, and it were ascertained that their average height was five feet nine inches, and that 1000 of them were between five feet six inches and five

feet seven inches;<sup>1</sup> we can at once determine, without measurement, to a very tolerable degree of accuracy what will be the number who will attain every other height; we know how many will be over five feet ten inches, over six feet, and so on. If therefore the number which actually present themselves is much less than that which calculation would determine, we may be very sure that some cause has been at work to withdraw some of those who should rightly have presented themselves. It was on this principle that M. Quetelet, examining the tables of heights of conscripts in the French or Belgian army, found that the numbers which were just above the minimum standard were considerably less than they should be. Hence he concluded that some kind of collusion or evasion had been practised, by which many of those who rightfully came just within the regulation height had been enabled to escape service. Again, a knowledge of the law in question is of great importance for those who have to collect statistics under circumstances of difficulty. Suppose we wished to ascertain the average height of the men of some savage tribe. Savages, as a rule, have a profound aversion to any such proceeding as being measured, not knowing what kind of mischief may come of it. But the traveller, as Mr. Galton has suggested, might get their chief to arrange them in order of height by the eye, as if drawn up for battle; might readily detect whereabouts the middle stature occurred; might pick out a representative of this stature, and one at a determinate proportional distance from the centre; and if he could per-

<sup>1</sup> The mean height alone is not sufficient; we want this and also the number of individuals at some other point. It will thus be seen that two data are needed: one to fix the mean point, and the other to fix the actual rate of departure from it. The *law* of departure from the mean is always the same, but what may be called the *scale* of that law in any particular instance will be different. It is as if we knew that a figure was a circle, but had to ask for information as to the size of the circle in any given case. If a good marksman and an inferior one both fire a great many times at a target, the bad shots of each will be scarcer than the good ones; and they will, roughly speaking, grow scarcer, according to the same mathematical formula; but the actual rate at which those worse shots diminish in number will not be necessarily the same. We must ask therefore for some information about their standard as marksmen (hence the need of the second datum); but when this is given, the conditions of the problem are then determined, and we ask for no more information, being able to supply it by our formulæ.

suade these two to submit, he would then have all the data needed, and for practical purposes be in the same position of information as if he had worried and frightened them all by the mysteries of his measuring-rod and tape. Here, as everywhere, a knowledge of the law of arrangement is an enormous reduction of the labor of observation and experiment.

The reader should carefully notice that there is nothing mysterious and novel in the principle of all this; the novelty lies merely in the extension of the principle to an unsuspected class of cases. As we said at the outset, uniformity alone is the basis of all inference; the characteristic of Probability is the detection of the existence of average, as distinguished from individual uniformity. When we have measured the length of a man's forefinger, we can reckon with some precision what is the length of his forearm, foot, and every other limb, because the proportions of the human body vary but little. The ultimate orderly grouping of a multitude of objects about their mean offers a precisely similar basis of inference, because here too there is found to prevail a proportion or order. The novelty in the latter case lies simply in the fact that an average order is detected by statistics, in a group where no corresponding individual order can be discovered.

One of the most important and extensive applications of this principle in any recent work is to be found in Mr. Galton's "Hereditary Genius." Indeed, we may say that no investigations of the kind instituted by him could have been undertaken satisfactorily by any one who had not thoroughly grasped the nature of the so-called Law of Error. That the children of clever parents are often themselves clever, is well known to every one; that they are often, in fact still more often, not clever, is an equally patent fact. The question, therefore, whether genius is hereditary—that is, whether the offspring of very clever parents are more likely than others to be above the average—is by no means a simple one. It not only demands a great amount of laborious statistical investigation, but it also demands for its adequate solution what we may call a mind steeped in the spirit of statistics—that is, in the principles of the Theory of Probability. It may be remarked that we assume (an assumption for which there are abundant rea-

sons of analogy) that mental attributes follow this same general law of grouping. Common language, as illustrated by its metaphors, has always recognized in the man of genius a mental giant, and in the feeble mind a dwarf; but common thought is very far from recognizing that these different degrees of mental stature will present themselves with about the same relative frequency as the corresponding physical degrees. But we may say with some confidence that this is so, and that therefore in any given state of society we could predict (given, as in other cases, the requisite data) how rare any assigned extent of mental excess or defect would be.

We will just mention two points on which the merely empirical statistician would be likely to break down in the above investigation: in the one case from want of the requisite conception, in the other from oversight in the process of reasoning. The first concerns the notion of a standard in estimating mental characteristics. We all know precisely what is signified by saying that a man is six feet high, for the use of the measuring tape admits of no confusion or ambiguity; but how are we to answer the question about any given individual, How clever is he? And yet something may be done here, when we realize that "six feet high" has a point corresponding to it on what may be called a universal scale. We can with some approach to accuracy pick out the three or four ablest men from a given group, say of a thousand; but this is at once a step towards a universal standard, for, owing to the considerations now insisted on, the fact of being one of a thousand means, with due cautions and restrictions, the same thing whatever the units under measurement may be. Mr. Galton has thus been able to give some precision to phrases which would otherwise be lost in vagueness, and to make us understand somewhat more exactly what sort of standard he means to set up by the use of the terms a "great man," a "very great man," and so on.

The other point referred to is an oversight of inference, into which no one need fall, but into which it is very certain that most persons do fall, in the absence of this kind of mathematical training. It is alleged that the offspring of very superior parents start with an enormous advantage over others, in

respect of mental endowments. The opponents of this statement, if they are rather more careful and cautious than ordinary, will probably think over a score or two of instances which have fallen within their own experience. So doing, they will find perhaps that only once in twenty times do the children rise much above the average, and they will probably conclude that a statement which is falsified nineteen times out of twenty must be regarded as pretty completely refuted. Such a conclusion, however, involves a total misconception about the nature of probable reasoning—that is, of reasoning about averages. Genius, from its nature, is very rare; if it were not exceptional it would not be called genius. Suppose that it means to be “one in ten thousand;” the ordinary person therefore, unaided by heredity, has but one chance in 10,000 of attaining to such distinction. Now conceive a class of people who have such advantages as to give them a chance one hundred times better than that enjoyed by the common herd. This represents of course a prodigious improvement, and yet even this would only give these fortunate persons one chance in 100; that is, we should expect them to fail 99 times for every once that they emerge into celebrity. The fact is, that when we are dealing with large numbers it is very difficult to keep clearly in mind their relative magnitudes, after and before alteration of this kind.

The reader will probably desire to know by what sort of natural process it is that this curiously uniform law of distribution of objects about their mean or average is brought about. Similarity of effect seems to point to similarity of cause; but what can be the similarity of cause underlying such an enormously wide and diverse range of objects and processes, natural and artificial? Unfortunately any complete discussion of this subject would involve too much of mathematics for the general reader; still, without getting into technicalities, we may give him a general idea of the nature of the process to which this state of things owes its origin. Imagine a rifleman firing at a mark. Were his eye and aim infallible, and his weapon perfect, he would invariably strike the centre of the target. In this case every shot being the precise repetition of the others, each one of the results could be foretold with certainty, and there being no opening for uncertainty, there would be nothing in the process

with which Probability need be concerned. In practice, of course, we know that things are very different; no muscles are so perfectly steady that they can absolutely avoid all tremor; no eye so keen and accurate that it can adjust the line of sight with mathematical accuracy. Then there are external causes which produce a disturbance which may often be very slight, but will never be entirely absent. The weapon itself falls short of ideal perfection; there will almost certainly be some wind to baffle the marksman, the sun will produce a disturbing haze, and so on. Now against these minute counteracting agencies we can do nothing; they are quite indeterminable, except when they are unusually powerful, and we must therefore strive the best we can and suffer them to do their worst in baffling our aim.

Now here come in the principles of Probability. These slight disturbances, though individually casual, are, in the aggregate, subject to some degree of law and order. That trembling of the muscles will in the long-run tell as much in one direction as the other, though we are utterly unable in each individual case to say how it will tell; similarly with the little irregular puffs of wind which may occur to thwart our aim, and all the other petty disturbances. Hence when all these are put together—that is, when their *aggregate* disturbing influence is reckoned up—we begin to detect signs of an orderly grouping. To get an extreme divergence—that is, to fail by making a very bad shot—a number of these petty agencies must all conspire together to pull in the same direction. From the nature of the case, this will be a rare event. To obtain a less wide divergence, a majority merely of them must thus conspire in one direction, whilst the remainder tend to counteract; this will naturally take place more frequently. The middle point, or bull's-eye, actually unlikely as it may be to get struck, will at any rate be more likely than any other specified spot of the same size, on the target. This is the case because this central point is attained when all the disturbances are about halved, one against another, so that their aggregate influence disappears. Hence the general result which we have said was to be expected, viz., that thickening and multiplying of results about the middle position,

and that rapid thinning off which they exhibit when we get to extremes.

The above example, which may be termed by comparison a natural one, may be expected to exhibit that moderate approximation to the strictly regular law which is mostly found in natural phenomena. Let the reader now compare the following: Take a hundred coins and toss them into the air; count the number of heads and tails which they respectively exhibit, and let the relative number of heads and tails be regarded as the unit of our observation. Repeat this process a great many times, and tabulate the results. That is, compute the number of occasions on which we get heads and tails each 50 times, how often we get 51 heads and 49 tails, and so on, ending with the extreme result of all heads and no tails. Similarly in the other direction, reading tails for heads, and ending with all tails and no heads. Here we have an artificial result, in which the disturbing agencies are more within our control, at least up to a certain point, and one in which the ultimate action of the Law of Averages will be enabled to display its working with very considerable accuracy. If, therefore, we have gone on long enough (we must add the caution for the benefit of any one who might be tempted to try the experiment, that he would have to go on for a very long time indeed in order to give each separate case a fair chance of establishing its proper relative frequency<sup>1</sup>), we should find this Law of Divergence from the mean exhibited, so to say, in its true ideal form. Each degree of departure from the mean value, viz., from that in which the numbers of heads and tails are exactly halved, will be represented ultimately by just the proper proportional number.

It may be objected, What is the use of giving illustrations from the tossing of a heap of coins, as if this were a process which could be compared with the carrying on of a purely natural

<sup>1</sup> The number of possible combinations of fifty coins is about fifteen hundred billions. Tossing fifty times in a minute, and continuing it day and night, the task of getting once only through all these combinations would demand, say, sixty million years as a minimum. So much for the functions of direct experiment in deciding these contingencies. (This, of course, refers to the justification of *all* the contingencies; if we were satisfied by the actual observation of the commoner ones only, a very moderate portion of a single life only would suffice for the purpose.)

operation like the production of the stature of men, or that of a quasi-natural operation like the firing at a mark? We answer that the things can be compared together, and very properly—not of course in respect of their nature, but in respect of the way in which the disturbances which affect them are commonly grouped together. In the case of the coins, every one can see the broad working of the principle, though only the mathematician can reduce it accurately to figures. Every one, we say, can perceive how the extreme result of all heads and no tails needs for its attainment the concurrence of every coin without exception; how that result in which there is one tail to ninety-nine heads needs a much less unanimous concurrence, since the appearance of any one of the one hundred possible heads will suffice to bring it about; and how the middle result, in which the two different kinds are equally mixed, enjoys comparatively very great facilities, since there are so very many distinct ways in which we could arrange them fifty and fifty together.

The general principle here (apart from all attempt at numerical precision) is obvious. It is simply that when there are a lot of independent results or agencies, we may much more often expect to find them some of one kind and some of another, than all of the same kind; and the more evenly they are divided, the more likely will the occurrence be. Now when we take the step from the coins to the shot-marks on the target, we can still detect the same principle, and can therefore account for the observed facts in the same way. We can still see how a very bad shot implies the combination together of a number of separate, independent, small, disturbing agencies (corresponding to the appearance of a large preponderance of the same face in the heap of coins); how better shots have more in their favor, since they imply a more even distribution of the disturbing agencies, and so on; till the centre of the bull's-eye, though not often to be hoped for, has at any rate a better chance than any other assigned spot on the surface. Now, when we come to purely natural objects, such as the measured lengths of the human body or limbs, or any other such natural feature, it must be admitted that we have not much more than analogy to guide us. If any one set about to prove positively that the distribu-

tion must be the same here as in so many other cases, it must be admitted that his attempt would be a failure. But then this is not demanded of us. Experience, as exhibited in a vast array of statistics, shows that this result does as a matter of fact prevail, so that all we have to do is to suggest some plausible explanation of the fact. We conclude, therefore, that a similar result implies a similar mode of origin, viz., that the influences which tend to enlarge or diminish the height, etc., are really composite, and consist of a large number of separate and mutually independent elements, which more often tend more or less to neutralize one another than to throw all their aggregate weight into one direction. Whence the comparative rarity of giants and dwarfs, and the comparative frequency of those of intermediate height; or, more accurately, the *rate* at which the middle heights tend to multiply as compared with the extremes.

The reader will now be in a position to enter slightly into the nature of the reasoning employed in Probability. It might seem, on first perusing a work upon the subject, as if this reasoning had but little or no connection with tendencies and ultimate averages, but was always stated in a form indicative of precision and certainty. We ask, for instance, what is the chance of throwing *six* with a common die; and we have the fraction one sixth given as the answer. We ask, again, what is the chance of doing this twice running; we are told that we must take this fraction and multiply it by itself to determine the value of the combined event; in other words, that the chance of getting sixes twice running is represented by the fraction one thirty-sixth. Similarly with any more complicated combinations of independent events; we just take the numbers which represent their respective probabilities and multiply them together to determine the result.

Now, such modes of reasoning as this may appear to spring from a view of the subject very different from that which has been hitherto explained and illustrated. But, in truth, there is no contradiction whatever. We are really doing nothing else here than what has to be done in every case when the strict principles of mathematics are applied to the ruder phenomena (rude, as we term them, because so infinitely complicated) of

nature. Rigid circles and straight lines are not found in external nature; but we often encounter what more or less resembles them, and we have to reason about these imperfect representations. But then our reasoning, if we look at the actual processes of inference, invariably takes for granted that the figures are truly and accurately that which they are supposed to be. We translate, that is, the irregularities of nature into the rigid terms of art (doing this with as little violence, naturally, as possible). We carry on our reasonings in and by these rigid terms, and obtain of course our result expressed in them. But then, when we have to translate our result back again into the realities of life, we must remember to make the due allowances; we must, so to say, step back again from those ideal constructions of mathematics, on to which we had had to step in order to carry out our calculations. The intermediate processes are unfailingly rigid, but the ultimate result must partake of course of those irregularities which were displayed by the primitive data.

This is what we do in the calculations of Probability. We determine the ultimate averages of the phenomena in question—that is, the proportions in which they indefinitely tend to present and arrange themselves, as explained at the commencement of this article. (*How* these tendencies are determined we shall have to explain presently.) This tendency in any given case is necessarily expressed in the form of a numerical fraction, and it is with these numerical fractions that all our calculations are carried on. Hence it comes that in any regular treatise upon the subject, the bulk of the work is almost entirely occupied with arithmetical and other mathematical processes. As we are not attempting to write a treatise here, but merely to give a general account of the logical and physical principles employed, we must entirely pass over this part of the subject—merely remarking that when the probabilities of independent events have to be combined, this involves the multiplication together of the fractions denoting the separate probabilities of the events; and that when the probability of an event which may be brought about by any one or more of a number of independent causes is to be determined, we have to add together the separate fractions to determine the result. These

calculations form the substance of the practical work of the subject, and hence it arises that to any one opening a treatise on Probability it seems as if it consisted entirely of mathematics. In case any one should be unable to see why the mere processes of multiplying and adding fractions should give rise to such profound mathematical devices as we are bound to resort to, he must be reminded of the enormous magnitude of the numbers often required to express the probability of what might seem no very complicated event. The possible combinations of even a few things give rise to very large numbers, as we have pointed out in a note a few pages back. Hence it comes that processes which, stated theoretically, involve nothing more profound than simple multiplication, are absolutely irreducible by the ordinary rules of arithmetic, for no human life would endure long enough to carry them out. Consequently, if they are to be attacked at all, we have no other resource than to appeal to the higher mathematics for methods of reduction and simplification. This is really the main reason why the calculation of chances is in practice such an intricate and profound mathematical process.

We have said that in the working out of any problem in chances, the first thing to be done is to put into the precise form of a numerical fraction an ultimate average or proportion which in practice could never be expected accurately to present itself, however long we went on, though we should continue to approximate nearer and nearer to it. From this consideration two very important deductions follow, one mainly theoretical, the other mainly practical. In the first place, nothing in Probability can ever be regarded as *certain*. It is, indeed, sometimes spoken of as if it were a method of evolving certainty out of uncertainty, and some such notion as this probably resides in the minds of a good many who have not read much, or at any rate have not thought much, upon the subject. But there is, unfortunately, no possible means of doing this. No conjury will evoke a certain conclusion out of uncertain premises. All we can hope to do by judicious methods is to *diminish* the uncertainty. But in saying this we must at once anticipate and obviate a difficulty which we do not think sufficient care is generally taken to point out. The mere processes of reasoning

cannot be trusted to diminish the uncertainty ; on the contrary, they will in many, if not in most cases, actually *increase* it, so far as most practical purposes are concerned. This follows readily from fundamental principles. Where premises are absolutely free from doubt, equally undoubted conclusions may be deduced. Where they are absolutely untrustworthy (say, imaginary or merely hypothetical) an equally untrustworthy conclusion will issue. Where they are probable we shall obtain a probable conclusion. But here comes in a difference : the two former characteristics being absolute admit of no degrees, it is simply a case of presence and of absence ; but the latter is a question of degree, and it will be found that for all practical purposes the degree of certainty is generally diminished.

To make our meaning here clear, let us examine a simple example. The chance of throwing ace with a die is  $\frac{1}{6}$  ; from this we deduce that the chance of doing this twice running is  $\frac{1}{36}$ . So stated, in their mathematical form, the premise and the conclusion look equally certain, and in a sense they are so ; for what we mean by these statements is that the former event will ultimately tend to occur once in six times, and the latter once in thirty-six times. But the moment we practically apply these numbers we shall see that, both of them being subject to a disadvantage, the latter possesses this disadvantage in the higher degree. This arises from the simple fact that the numbers in the latter case are larger, and will therefore require a longer succession to display themselves. When, therefore, they are both restricted to the same length of time, the latter will be at a disadvantage. Afford them both indefinite scope, and there will be no prerogative of one result over the other ; cramp them both into the same short space, and the one which demands the wider limits to display its average will necessarily be at a disadvantage. In other words, if one man continues to bet fair odds against the occurrence of a single ace, and another to bet fair odds against the occurrence of aces twice running, and they keep at it for the same time, the latter will be playing the most risky game.

When, therefore, precise numerical results are assigned in Probability, it must be clearly understood that these merely

represent *limits*, or those ultimate tendencies which would gradually justify themselves more and more as time advanced. How far any justification for them will be detected within the practical range at our disposal, is quite another matter. The arithmetician will assign with equal explicitness the chance of any player at a game of whist getting his four trumps, and that of his getting any specified thirteen cards. But whereas a few hours' play will afford a rough test of the former computation, all the play of the whole world, though this were continued for thousands of years, would leave the latter statement dependent entirely on theoretical considerations.

This brings us to one of the most important practical bearings of our subject, and to that which more than any other has given ground to the profoundest calculations of mathematicians. We can, of course, only attempt the barest outline of the results which have been attained here. Having remarked above that every conclusion in Probability is, from the fundamental principles of the science, tinged with uncertainty, the obvious question which every one will be prompted to ask is, *How uncertain is this conclusion in any given case?* The instance just adduced of the throws of the dice, simple and doublets, will indicate to the reader how two results, which are equally precise in their numerical assignment, may have to be regarded with very different degrees of confidence, within given limits for their occurrence.

The reader must not for a moment suppose that in thus putting a value on the uncertainty we can hope to attain an *accurate* determination. This secondary or derived result is of precisely the same general character as the original one, being simply the assignment of a limit or ultimate proportion towards which the events will tend, though like that original result it will be expressed as a determinate numerical fraction. Out of data which consist of unlimited statistics, nothing but similar statistics, demanding a potentially unlimited range, can ever be extracted. As this point will seem abstruse to those unfamiliar with the subject, we will recur to a former example. The chance of a die yielding ace is  $\frac{1}{6}$ : as the meaning of this statement has been fully explained we will let it pass now. Take, then, six throws, and examine the results. There seems a

natural propriety in just *one* of these being ace, and it is sometimes spoken of as if this result might be "expected." But it is clear that this result is very far from certain; its superior likelihood is merely comparative, for we might not have an ace at all, or we might have more than one. We may ask, therefore, What is the chance that the assigned result shall be justified? in other words, What is the chance that the event will be what its chance assigns? In the case specified the answer is expressed in rather large figures,<sup>1</sup> but may be very roughly assigned as  $\frac{1}{2}$ . That is, the chance that we should have just the one ace and no more is merely one half. This answer, when drawn out into the statistical form, means that if we were to go on taking batches of six throws and examining the results, we should find that there was a gradually developing tendency exhibited for about one half of these batches to have one ace and one only. But then just the same question might be raised again here, for we might ask, What is the chance that *this* chance, of  $\frac{1}{2}$ , will be right within any assigned limits? and so on forever. In a word, out of probability nothing but probability can ever be extracted.

The principal practical application of the above considerations is found in the processes of *measuring*, whether for astronomical or surveying purposes. Here the notion of an "error," as it is technically called, is prominent and most important; for some error, great or small, can never be expected to be avoided. In the case of the die, there was a reasonable finite chance of our result being exactly right—that is, that precisely one in six of the throws should give ace.<sup>2</sup> But when we are concerned with measurements, this is not so. The liability to

<sup>1</sup> To do this exactly we must have ace once, and some other figure five times. The chance of the former is  $\frac{1}{6}$ . That of the latter on each separate occasion is  $\frac{5}{6}$ , and therefore of doing it five times is  $(\frac{5}{6})^5$ . Multiplying this by 6 (for any one of the six times will answer our purpose), we have as the result,  $6 \times (\frac{5}{6})^5 \times (\frac{1}{6})$ , or  $\frac{3125}{648}$ , or something less than one half.

<sup>2</sup> This arises, of course from the configuration of the die, which, having six equal faces, must necessarily present one of them exactly upwards when resting on a flat surface. In other words, if the die is so thrown as very nearly to turn up ace, it will, of its own accord, insure that this is done exactly. But in the process of measuring there is no such necessity; if we are very near getting a given result, there will not, as a rule, be any inherent tendency in the instrument to make us obtain it exactly.

error is continuous here—that is, between any two given results there would be room to interpolate another; so that precisely the same result would never be attained on two different occasions. This would be rigidly the case were our instrumental results capable of being read off exactly as they are given, and with the modern precision of instruments is practically true.

The way in which this notion of an error commonly presents itself is this: We set an observer to measure an angle, say, for us, whether it be the angular distance between two stars or two objects on earth, or whatever else. He assigns the best result he can attain to with the instruments at his command, suppose it be  $32^\circ 20'$ ; but when he gives the result, he appends to it some such words as these: "Probable error  $\pm 15''$ ." What is the meaning of this? Of course it does not mean that we really know what is the magnitude of the error, for if we did we should at once make the necessary correction, and say nothing about it—in other words, there would not be an error at all. Nor does it mean that the error will lie between the limits of  $15''$  one way or the other; even this it is quite out of our power to assert. What it really does, and what is all that it possibly can do, is to give some information about the *average* error in cases of the precise kind in question. Suppose that the same observer made a succession of such observations with the same care. Sometimes he would be very near the real truth; sometimes he would be a long way from it; sometimes, by a rare chance, he would almost exactly hit it. Now suppose, after a number of such observations had been made, and had grouped themselves (as we know that they would) about the true result, that we set up limits on each side of this true result, such that they should take in just half the estimated values, and therefore exclude half. These limits mark what is called the "probable error"—that is, in other words, the probable error is one of such a magnitude that we are just as likely to exceed it as to fall short of it.

There is, of course, something that is arbitrary in this. We might have taken another value than one half. We might, if we had pleased, have defined the "probable error" to be one of such a magnitude that the odds were ten to one that we should not exceed it in any given case. But the particular value we

thus select is really of very little importance, since the conception of it can hardly be needed, except for purposes of comparison. If one observer thus gives us a result, with a probable error of 15", and another gives us a result with one of 12", we have at once a basis of comparison between them which is sufficient for our purpose. All that is needed is, that we should consistently retain the same definition; and there seems, therefore, no reason why the simple one in use should be changed for any other.

The same phrase is used in the calculations of life-insurance. When it is said that the "probable duration" of a certain man's life is, say, thirty years, this does not assign any duration which he is really likely to attain. Any specified length which we may mention is, in itself, very unlikely, as compared with all other lengths. It would be as if a sporting-man were to back one particular horse out of the whole number to win the race; as every one knows he would rather bet *against* each individual horse. All that it means, in fact, is that just about half the men of his age will die before they reach that age, and half after they have attained it. We mean, that is, that it is just an even chance that he will be alive then.

There is another application of this subject which must be briefly noticed here, with the caution, however, that its due mathematical investigation takes us to the very kernel of all the difficulties of principle and calculation which have grown about it. This is the celebrated method of Least Squares. We have just been discussing the state of things when we have made a single calculation or observation, and knowing, of course, that it is likely to be more or less wrong, wish to know *how* wrong it is likely to be. Now suppose that we have several such estimations given us which do not agree with one another; what are we to do? All of them cannot be right, for they are mutually discordant; so we want to discover some mode of treating them which shall result in a single estimation which shall be better than any one of them. Probably most people would answer at once, "Oh! take the average." To this summary recommendation there are two objections: first, that "averages" cannot always be taken, as we will presently show; and, secondly, that we should like a reason for the ad-

vice. The fact is, that we are so used to taking the average in simple cases that we look upon it as self-evident. If two men, after having measured the length of a wall, give us respectively fifty-one and fifty-four feet, we should settle the discordance by taking the mean, namely, fifty-two and one half. And many would clinch this by an *à priori* argument that it must be so, for, having no possible reason to prefer one result to the other, it would be irrational to do any thing else than put them on precisely equal terms by just halving their difference. But, as regards this argument, compare the following case: Two sailors from a ship are sent to steal into a fort and take the calibre of a cannon. We may suppose that the fort is going to be taken and used against the enemy, and that it is therefore of importance to provide shot of the right calibre. One sailor says he made the calibre eight inches, the other made it nine. What should we say of the wisdom of the captain who should go there provided with shot of eight and one half inches, there being, let us say, no such calibre in the service? It would be as if a man who was uncertain whether or not he had been asked to stop to dinner somewhere were to meet the case half-way by going in dress trousers and waistcoat, but in a flannel shirt and check coat. In the case of the cannon, it would be better far to toss up than to try to "combine" the observations.<sup>1</sup>

<sup>1</sup> A rather curious case of this kind has recently fallen under our notice. It is an attempt to determine the length of certain ancient measures, such as the cubit, simply from the examination and measurement of ancient buildings (we ought to premise that we only know the work in question at second-hand, not having had an opportunity of consulting it). At first sight, the attempt may seem absurd; for why, it may be asked, should any part of a building be of one particular length rather than of another? The only assumption with which we start is that fractions of cubits are less likely to present themselves than whole ones, and irregular fractions less likely than such simple ones as halves and quarters. In modern buildings, of course, the exigencies of space in a crowded city are paramount; but in more roomy times it seems plausible enough that builders would have preferred unbroken units to work with, when possible. Starting with this assumption, the problem becomes feasible. We collect a large quantity of measures of lengths and heights, etc., of these ancient buildings; we examine their differences and ratios, and ascertain whether these show a tendency to yield frequent multiples of some particular magnitude. If they do, this magnitude is presumably the lost ancient measure, or some fraction of it. Of course, all this *may* be the mere result of coincidence; whether it is so or not must be decided on principles of probability, by seeing how many independent magnitudes have been examined for the purpose.

It is obvious, therefore, that *one* tacit condition always underlies the doctrine of taking an average—viz.: that every intermediate value is not indeed equally likely, but, at any rate, equally possible. When this is worked out, we shall soon see that a reason can be given for the advice, which depends partly upon observation and partly upon mathematical deduction. Let the reader recur to what was said, some pages back, about the way in which the measurements of objects (in common with many other things) cluster about their mean or central point. The central values are the commonest indeed, but all are possible, and will, in the long-run, get duly represented. Now, suppose that three of these measures are set before us, and suppose also (what is always the case in practice) that we do not know where the ultimate mean is (in fact, so far from knowing it, the position of this mean or true value is just the very thing we want to ascertain), what are we to do with our three discordant results—our three different values of the angle or distance which we want to measure? Shall we toss up to decide? Shall we just take the intermediate one of three, or shall we take them all three into account? If the latter, in which way are they to be combined, out of all the different sorts of combination that might be proposed? It is here that the mathematician steps in, for we are now in his province. He is able to assure us that, by taking the mean or average of the three results, we are not only adopting the simplest plan, but the *best*. No method is absolutely good, for, as we have so often repeated, no method can entirely avoid error; but the one in question has the merit that the errors to be feared from it are, on the average, fewer and smaller than those to be feared from the use of any other.

We have said just above that it is not in every case that an average *can* be taken. Revert once more to the instance of the target. Suppose that several shots having been fired at a point on a wall, the point aimed at had been afterwards removed, so that nothing was left to indicate what spot had been aimed at, except in so far as this could be determined from the shot-marks themselves. This case is a very fair analogy to a large class of instrumental observations. For simplicity, let only three shot-marks be assigned. No one can here give the sum-

mary recommendation, Take the average ; for an average, in the conventional sense, does not exist. The next suggestion might perhaps be : Take a point that shall be just equally distant from all three as the most likely one. In some cases this rule would answer fairly well, but it would break down utterly if the three points were nearly in a straight line, as in that case the selected point would be very far from all three ; and, when they were quite in a straight line, it would be infinitely far off, which is absurd. The suggestion of the mathematicians sounds a little complex, but is really the simplest that could be chosen for working purposes.<sup>1</sup> It is to select, as the most likely spot to have been aimed at, that point which shall make the sum of the squares of its distances from the three shot-marks the least possible. Thence is derived the name of Least Squares. We cannot attempt any proof of this result, of course, but must merely remark that, in our judgment, its justification is of the same kind as that which was offered for the simpler case of taking the average. We start with the assumption that the shot-marks would tend to group themselves uniformly round the spot aimed at (rejecting or allowing for any permanent disturbing causes, such as constant wind, etc.), an assumption which reason and experience justify. We then determine by mathematics what mode of combining any three or more of these elements, and thus deducing a “probable” centre for the shots, will give a result which will, in the long-run, diverge least often and least widely from the truth. The mathematicians seem to have decided that this is the case with the result given by the method of Least Squares, whence its justification.

We must say something now in answer to the question, suggested some way back, how the chances of any particular events are practically to be determined. There are two ways of doing this, broadly corresponding to what may be termed artificial and natural modes of producing events. In the former we determine *à priori*—that is, by a consideration of the shape of the object, or the mode in which it is worked, in what proportions the events which it produces will ultimately distribute them-

<sup>1</sup> It is also the simplest in the sense that it is doing nothing more than choosing the *centre of gravity* of the three points, regarding these as of equal weight.

selves. In the latter, we determine these facts *à posteriori*—that is, by a direct appeal to statistics—to inform us what they actually are. If, for instance, we want to know what is the chance of getting just three trumps in a hand in a game at whist, we should never dream of taking notes of what had occurred in former deals. A serious objection to such a course would be the time which it would demand, for millions of millions of years would be required to exhaust all the possible combinations only once. What we do, of course, is to calculate the number of possible combinations, and then compare these with the number which will answer our purpose. There is plenty of justification for such a plan, one simple argument being this: Why should a particular card come out oftener than another? Presumably from some difference in its shape or nature; either because it is larger or thicker, or more or less slippery, etc. The makers, by taking care to reduce such differences to an amount absolutely indistinguishable, insure for us perfect fairness as between card and card. And the experience of every player, at least as regards the commoner sorts of occurrences, confirms us in the belief that the events do really happen as we expect that they should. We may say, therefore, that, however true it may be that the ultimate justification of the premises depends upon observation and experience, our calculations in such cases are rested entirely on what may be called *à priori* considerations.

The above remarks apply to cards, dice, roulette tables, and generally to every application of probability in which the constitution and behavior of the objects in question are under our own control, or can from any other reason be accurately determined. From the nature of the case they apply to nearly all games of chance; and, for that matter, to not much else. But when we come to examine natural objects and processes, we are, as a rule, quite unable to say beforehand what these things will do. The objects themselves are often far too irregular, and their modes of action far too complicated and obscure, for us ever to be able to penetrate into their nature and calculate their behavior. Who, by looking at a man and studying the state of society in which he lives, would be able to guess how long a duration of life he might expect to attain? We

cannot even distinguish beforehand, except very roughly, between healthy and unhealthy modes of life; and cannot in the least determine how much advantage the one will have over the other. In these matters, therefore, insurance societies, and others interested in the results, have to rely entirely on the data offered by experience. Many people would imagine that the life of an English agricultural laborer is a "good" one, for his wages are no longer really low, and he is always in the fresh air. But the fact is that the Accidental Insurance societies class him among their "hazardous" lives. We presume that the chances of being kicked by a cart-horse, gored by a bull, crippled by rheumatism and so forth, more than counterbalance the small tradesman's worry and anxiety, and the clerk's cramped position and unwholesome air.

Of these two methods, the first, or *à priori* method, where practicable, is far the best. It assigns at once in the limit, in the form of a fraction, that ultimate average towards which experience slowly and gradually gropes, knowing that it will never reach it. The chance, or fraction so assigned, is subject to one kind of error only; the inability, *viz.*, to secure any certain justification of it within the comparatively short space of time which can generally be afforded. This we have already explained, and have pointed out that an ultimate tendency can never be proved, or even illustrated, within a finite range of examples. But then this same limitation of experience tells with twofold force against the results obtained by the *à posteriori* method. It not only, as above, invalidates the experimental proof of the result, but it also invalidates the process of obtaining it. When we say that the chance of ace with a die is one sixth, we are at least sure that this fraction is right—that is, that it really represents the limit. But when we say that the chance of a man aged 32 living 27 years is, say  $\frac{1}{6}$ , we are *not* sure of this fraction. It is itself obtained from a too limited experience, which being unable certainly to verify the chances if they are given to us, is equally unable to take the prior step of obtaining them for us. That is to say, we cannot tell for certain what *is* the real chance of any given man's life; partly because we cannot get any but a limited range of statistics to yield it, and partly because the social and

other conditions under which these statistics are given are subject to fluctuation. We can only approximate to the chance, to begin with, and can then only approximate to its subsequent verification.

We may say something here upon a point about which the reader may have expected to hear some remarks before. It may seem rather late in the discussion to have the question put, *Is there such a thing as Chance?* and many will think it odd if we say that for our purposes it really does not matter whether there is or not. Before any sensible remarks can be made upon the subject we must come to some understanding as to what is meant here by chance. We have, it is hoped, made it pretty plain what is meant by "the chance, or probability, of an event;" but what do people mean by chance itself; by chance, as an agent, that is, if we may give it that name? All that we can understand by the term is *absence of causation*—that is, absence of regularity. In physical science we mean by the cause of an event that group of antecedents by which the event is always brought about. The doctrine of causation asserts the regularity of such sequence in every case: it maintains that the same cause will always be followed by the same effect. By denying causation, therefore, we should be admitting, in certain cases, the existence of irregularity, of spontaneity, of unpredictability, as we may variously express it.

Does then chance, in this sense of physical capriciousness, exist in nature? Every student of science will give an emphatic negative. He will declare that wherever we look, at least amongst physical phenomena, we see signs of unfailing law and order. The religious philosopher will of course maintain that there is something underlying all this; that this sequence of events indicates a Designer, dates from an Origin, and affords evidence of an End. But he will be quite at one with the others as to the general existence of this uniformity when we merely look at the phenomena. Amongst competent physical students at the present day there is in fact no dispute as between law and caprice, causal and casual connection: the only dispute is as to whether the regular sequences we observe afford ground for belief in the existence and agency of the Deity.

If then we are asked whether there is such a thing as chance in the world or not, we should say certainly not. Nor is it in the least implied in Probability, as we have grounded it, that there should be. All that we have implied is our ignorance about many of the detailed events, which is an extremely different thing from declaring that these events actually lack the regularity upon which any knowledge could be built. We fully believe that the turning up of one face rather than another of a die, is "caused;" that is, that if we could precisely repeat the antecedents any number of times we should always obtain the same result. But the adjustments upon which this result depend are so excessively complicated and delicate, that all prevision is impossible. Hence our ignorance about the event beforehand is just as complete and absolute as if there really were none of that regularity which affords what we call a cause. Therefore we abandon as hopeless any attempt to determine the single event, and we fall back upon our knowledge of the average, or that statistical knowledge which has been described; and we make what we can out of this, which, as will have been gathered, amounts really to a good deal.

The question whether people *believe* in the existence of chance is of course quite distinct. Some would settle the matter summarily by declaring the belief in causation a necessary belief. But we think that any one who had ever tried to ascertain what an ill-trained or puzzle-headed person *does* believe, will find that he has got quite enough to do there without attempting also to determine whether he believes it necessarily. The problem seems to us a hopeless one, and also one of no importance. Before we can get any one to say rationally whether he believes a doctrine, or can try to decide for him whether or not he does believe it, we must make him understand the doctrine. Otherwise, if we attempt to elicit an answer from his behavior we shall obtain contradictory replies. In certain respects he proceeds on one theory, in certain others on another, generally confounding the two together. It is quite enough, therefore, to remark that all cultivated minds seem to have entirely rejected the doctrine that any events occur casually; that is, without a regular phenomenal cause.

The true antithesis, then, is not one between what is casual

and what is causal; it is rather between what is casual and what is designed. That is, we cannot draw a line between what is brought about by causes and what is not so brought about, for in the scientific view every event without exception has its cause. But, within this boundless range of causation and regularity, some events are brought about by the process which we may call "chance production," and others are brought about by design. These two classes are not logical contradictions, in the sense that every event must belong to one or other of them; and in many cases it is extremely difficult to decide to which of them any particular event must be referred. But there is probably no branch of the subject of Probability around which a greater quantity of popular philosophic interest has gathered, and therefore we must say something about it here.

We will begin with a simple example. Suppose that any one finds on a table, in a room, ten coins, each with "head" uppermost; and the question is asked: "Is this result casual or designed?" Almost every one would say that it was designed; and if asked for his reason, would reply that it was very unlikely that the coins should all have turned up the same face accidentally. How unlikely it was can be settled in a moment; ten coins, with two faces each, can be combined in 1024 ways, and only two of these give all the same face. Therefore once only in 512 times should we expect to find this regularity as the result of casual agency—that is, brought about in the way appropriate to the theory of chance. But then for a basis of comparison we ought to know how unlikely the other contingency is—that, namely, of design. The fact being undisputed that the coin has so turned up, the only doubt is as to the respective frequency of the two kinds of agency by which the event might have been brought to pass. It is here that we break down, owing to the hopeless inexactitude of all such problems. We do know how often a coin will turn up head of its own accord when duly tossed up, but we do not know how often human beings will turn it up so. Something depends on the kind of agents and the nature of their employment. Were the coins found in a gambling-house, we should conclude that, owing to the little time and taste the players probably had for

orderly arrangement of their coins, the designed arrangement was comparatively unlikely. On the other hand, had the table been that of a coin-collector, we might think it decidedly more likely that, for the purpose of comparison, he had set them all the same way uppermost. In this way we can do something towards indicating in what cases one event is more likely than others; but we can do nothing towards settling the problem in the only way in which the scientific man would regard it as settled, that is, towards saying *how* much more likely it is.

Is, then, all attempt at reasoning on this particular subject futile? By no means; if it were, an enormous amount of the decisions of practical life, to say nothing of those given in the law courts, would have to be rejected. Here, as in so many other cases, where we are quite unable to estimate differences numerically, we may still be able to assign a limit beyond which we feel safe in denying that the event can occur. A common laborer has never heard of a dynamometer, and has no conception of fixing how much stronger one of his fellow-workmen is than another, but he would risk his life on a bet that none of them could lift 2000 pounds. In some such way as this we are often enabled to bring the two classes of agencies—the definite numerical one which represents the pure chance, and the indefinite moral one which represents the design—into comparison with one another. Calculation may show that the former is so exceedingly small, that we feel quite confident that the latter, indeterminable as it is, must outweigh it. If 1000 coins were found, like the ten we mentioned, all face uppermost, no jury would believe a man on oath who declared that they had simply come so by a succession of fair tosses.

Let us now take a more complicated example. A Scotch astronomer, Mr. Piazzi Smyth, wrote a work entitled "Our Inheritance in the Great Pyramid." The work was intended to prove that a variety of modern scientific results were hidden away in different ways in that building; that its sides faced precisely to the points of the compass; that one of its passages pointed exactly to where the pole-star was situated a certain number of centuries ago, and so on. He also maintained that it contained a number of standard measures—mostly, as it happened, English ones; that its measurements were exactly

expressible in English feet and inches; that a certain sarcophagus (as others had interpreted it) was really a standard quarter measure, and so forth. Among these results it was maintained that the length of the four sides, at the base, stood to the height in the exact proportion of the circumference to the radius of a circle. We forgot to how many decimals the result (of 3.14159, etc.) was guaranteed, but at any rate the precision attained was declared to be something far beyond the rude scientific knowledge of that age.

In such a case as this, even the assignment of the numerical chance becomes difficult, and can only be effected by the aid of various more or less arbitrary assumptions. In the first place, we must set some limits to the height as compared with the base. If too high the building would be unsafe, if too low it would be ridiculous; consequently it is not from amongst all possible heights, but only from a limited range of them, that the selection could have been made. Then, in the next place, we must decide to how close an approximation the measurements have been made. If they are true to the hundredth part of an inch, the coincidence, if such it were, would have been much more astonishing. Suppose that this has been done, and that it has been ascertained that out of 10,000 possible heights for a pyramid of given base just that one has been selected which would give, in proportion to the circumference of the base, the desired ratio of the radius to the circumference of the circle. We should then seem to be in possession of the elements which determine the "chance" alternative, and when we had got hold of the elements of the "design" alternative (that is, how likely builders were to employ the ratio in question, if they knew it, and how likely they were to know it) we might make the comparison. To attempt to give a numerical solution would be obviously futile, but, having raised the question, we may just remark that in our own judgment the coincidence was most likely *not* due to chance.<sup>1</sup>

<sup>1</sup> We must not conclude, however, with Mr. Smyth and his followers, that this would prove that the builders knew what was the ratio in question, but merely that they knew and employed some method which produced it. A teredo can bore a hole—that is, make a circle which exhibits its due ratios, as accurately as a geometer; but we do not credit it with a knowledge of mathematics. An ingenious suggestion has been made by a writer in *Nature*, that the

In the above remarks we have assumed that, out of the 10,000 possibilities, only *one* ought to be regarded as favorable, viz., that which indicated the ratio in question of the circumference to the radius. But this is not warranted. The point is a somewhat subtle one, and we almost owe an apology for introducing it at the end of an article. But we cannot altogether pass it over, for, as we have said, there probably is not a single side of the whole question of Probability which has given rise to an equal amount of that philosophical and theological discussion in which most of our readers will be likely to take an interest.

Suppose that in the above example the ratio had come out just double of that which it actually was, would not this have been taken as equal evidence of design? Or if it had proved to be double or treble the ratio of the diagonal of a square to one of its sides, would not this also have been of nearly equal significance? Proceeding in this way, we may suggest one known mathematical ratio after another until almost every single one of the 10,000 supposed possible intermediate positions has been occupied. If this were done, one might argue thus: Since every possible height of the pyramid would mark *some* mathematical value, a builder, ignorant of them all alike, could not help, nevertheless, stumbling upon one of them; why then attribute to him design in one case rather than in another? This shows that we have not got to the bottom of the question, and we had better, therefore, look again at some such simple problem as that of the ten coins. In this case it is readily seen that ten "heads" is just as likely, neither more nor less, than heads on seven specified coins, and tails on the other three.<sup>1</sup> Against each single specified arrangement the odds are the

builder may have proceeded somewhat as follows: Having decided on the height of his pyramid, he drew a circle with that as radius. Laying down a cord along the line of this circle, he then drew the cord out into a square, which square marked the base of the building. Hardly any simpler means could be devised in a comparatively rude age; it is obvious that the circumference of the base, being equal to the length of the cord, would bear exactly the proper ratio to the height.

<sup>1</sup> Seven *specified* coins. The chance that *any* seven should be head and the other three tail, is 120 times greater, being equal to  $\frac{120}{1024}$  or  $\frac{15}{128}$ .

same, namely, 1023 to 1; for each one of them would present itself on the average once only in 1024 times.

It is clear, then, that it is not on this side—viz., the chance or physical side—of the problem that we are to seek for any ground of greater likelihood of one of these events over another. It is rather on the “design” or moral side that the difference is to be sought. Out of the whole number of possible throws, two only excite any curiosity, viz., those in which all are alike heads or tails. These two alone, therefore, are generally likely to be designed. As we have already pointed out, other considerations must decide (as well as they can) whether *any* designed arrangement is likely under the circumstances; but, admitting design at all, we feel little doubt that it would show itself in one of these two ways. In this case it is mere curiosity, so to say, which gives its greater significance, and consequent greater likelihood, to two of the various possible arrangements. In other cases this significance may be brought about by convention. For instance, in cards, “queen of spades and knave of diamonds” is exactly as uncommon as any other specified pair: moreover, till *besique* was introduced it offered no superior interest over any other specified pair of cards. But now, since that game has been frequently played, it has been taken up at once into the department of coincidences in which interest is felt; and, given dishonesty amongst the players, its chance of being produced designedly is quite different from what it once was. Returning then to our pyramid, we see good reason to suspect that the ratio offered by the circumference and radius of a circle was designed. Almost every value indeed would correspond to *some* mathematical ratio; but most of these offer no kind of popular interest, and could hardly by any possibility have presented themselves to the minds of men in primitive times. But that of a circle, from the simplicity and commonness of the figure, stands on a very different footing. It is the easiest of all figures to produce; and therefore the chance that its ratio, or a method productive of this ratio, should be designed, assumes at once a prominence denied to all others. It occupies, in fact, relative to the other possible values, much the same position that “all heads” occupied amongst the 1024 possible throws.

The fact is, that we ought to distinguish carefully between what is *rare* and what is *remarkable*, in the cases in question. People will occasionally ask some such question as this: What is the rarest, or most unlikely deal, that you have ever actually witnessed at a game of whist? So phrased, the question is absurd. The cards being all distinguished from one another, any one hand of thirteen is just as unlikely, neither more nor less, as any other; and one will therefore occur in the long-run as frequently as another. But some hands are decidedly more remarkable than others, in the sense that they strike our fancy more, or are more valuable for purposes of play. It may often be difficult to assign a numerical estimate to this fancy or this value, especially to the former; but the inquiry itself is an essentially reasonable one. It is doubtless in this sense, therefore—viz., as to what is most remarkable—that the question is to be interpreted, though it may have been awkwardly expressed in the form of an inquiry as to what is most rare.

The general problem then before us, when we have to decide between chance and design, is this: On the one side, when we look to statistics, we have a large group of contingencies, each of which, being but one out of the many, is of course very rare, and its occurrence very unlikely. If popular judgment regards all these contingencies with equal interest or indifference, we have so far no ground to expect that there had been any design displayed in the choice of the particular contingency which experience shows to have occurred. Commonly, however, this is not the case. Popular judgment assigns a peculiar interest or value to one or more of the contingencies, and hence creates a small sub-class amongst these contingencies which stands on a favored footing. We then have to settle the question, What is the chance that people should exercise this kind of design in the case in question? This is, as a rule, a hopeless matter to determine, though we may often be able to assign roughly some limit above or below which we feel sure it will not extend. This done, there remains the arithmetical calculation of the relative frequency of these two classes of cases, which, when the data are assigned, would admit of at any rate an approximate solution.

From the brief remarks which we have been able to make

upon this subject, the reader will be able in some degree to judge of the almost unmeaning vagueness of the inquiry which has been actually raised, and is occasionally repeated, as to whether the world could have been made by chance? In such simple examples as we have just been discussing, both the elements of the inquiry are apt to complicate themselves beyond hope of fruitful treatment; but here they both get into a state far beyond all hope of rational comprehension. As regards the mere numerical side of the question, the calculator of probabilities amongst cards and dice is doubtless fond of disporting himself in the midst of such figures as render an ordinary head dizzy to contemplate; but what sort of mental audacity must he have who would propose to decide what figure represents the total number of possibilities of creation out of which the existent world is to be regarded as having turned up or been selected? Such a mind would doubtless feel itself equal to undertaking the other side of the problem—that is, to deciding exactly how likely an omnipotent and omniscient Creator would be to understand and make use of schemes which we should recognize as design. It is almost an insult to ordinary intelligence to remark that figures, or any part of our nature which has to do with figures, are quite out of place in inquiries such as this.

JOHN VENN.

## FAITH.

HOW can we account for it that Faith, relatively unrecognized before, became at once so prominent on the introduction of Christianity? As a requirement, it was not only made prominent, but essential, both by Christ and his apostles. When asked by the Jews what they should do that they might work the works of God, our Saviour replied: "This is the work of God, that ye believe on Him whom he hath sent." They were not simply to believe what he said, but were to believe *on* him; and that is faith. Identical with this was the direction given by Paul and Silas to the jailer: "Believe *on* the Lord Jesus Christ, and thou shalt be saved." "Therefore," says Paul, "we conclude that a man is justified by faith without the deeds of the law." And not only was faith made a condition of salvation as an initiatory step, but it was to be the inspiration of the whole life. Christians were to "walk by faith," to "fight the good fight of faith;" the victory by which they were to overcome the world was their faith; they were to "live by faith."

In making faith thus prominent Christianity was wholly original. Associating, as we do from our earliest years, both the name and the thing with religion, and as we grow up finding it incorporated into all our religious literature, it is difficult for us to realize how original the full adoption of this principle was, and how strange it must have seemed both to the Jews and the Gentiles. Faith was indeed the spiritual element under the Old Testament dispensation, and in that sense its underlying principle, but the system was one requiring legal and ceremonial observances; it was to them that attention was directed, and

through them that faith was to look. In connection with these observances an intense system of ecclesiasticism had grown up, and nothing could have been less likely to occur to a Jew than the possibility of a religion that should retain the principle and drop those rites and forms, divinely appointed, in which it was embodied—rites elaborate, magnificent, connecting themselves with the early associations and the national pride of every Jew, and on the maintenance of which the respectability, the livelihood even, of a large and influential class seemed to depend. The prominence of faith in the New Testament cannot therefore be accounted for by the fact that it is, under the name of trust, the spiritual and underlying element of the Old Testament. In that the word itself occurs but twice. So far, indeed, was it under that from full or even distinct recognition, that the Apostle Paul in the Epistle to the Galatians speaks of it in contrast with the old dispensation, and as having first come in connection with Christianity. “But before faith came,” he says, “we were kept under the law, shut up unto the faith which should afterwards be revealed. Wherefore the law was our schoolmaster to bring us unto Christ, that we might be justified by faith.”

But if this prominence of faith seemed strange to the Jew, much more must it have seemed so to the Gentile. No heathen religion ever inculcated faith as a duty, or made it a distinctive element of itself in any way. So far as appears, the philosophers had never given attention to the state of mind indicated by the word, they had not recognized it as a principle of action; and certainly, aside from some object of it such as no heathen religion presented, there was nothing in it to awaken the enthusiasm, or attract the attention even, of the common people.

How, then, the question recurs, shall we account for the prompt and full instalment of faith in a position so prominent, and with a function so vital, at the very commencement of Christianity? We can do it only by supposing that Christianity understood itself as it could not have done if it had not been inspired—and, understanding itself, the prominence and function given to faith were a necessity. The originality of giving this place to faith, great as it was, was not, however, if I may so say, primary. Faith was, indeed, original as a requisition

upon man, requiring a certain state in him, but it was made necessary by that feature in the revelation itself in which that was wholly and primarily original. (That feature is, that the salvation offered by Christianity is gratuitous. It is a gift. It is wholly free. It is not for those who merit salvation. It knows of merit, but not in those that are saved as the ground of their salvation.) It presupposes sin, and is a salvation from that and its consequences. It is in this freeness of the salvation which it offers that Christianity is wholly original. As compared with all religions originated by man, it is an entire change of method—a reversal of all that could have been conceived by him. Conscious of having merited the divine displeasure, and feeling his need of salvation, man would naturally inquire what *he* must do, and would attempt some mode of propitiation. He would offer some gift, build some temple, go on some pilgrimage, submit to some penance. That this has been the uniform course of human thought and action, all history shows. It never could have been supposed by man, and no shadow of such a thought enters into any heathen religion, that God would, of himself, wholly self-moved, so do all that was needed, all that could be done for salvation, as to leave nothing for man to do but to accept what had been done and provided as a free gift. But this is Christianity. The proclamation of the fact that God has done this is the Gospel—the glad tidings, and that proclamation is to all. “Whosoever will, let him come and take of the water of life *freely*.”

Is there, then, no condition but that of acceptance? In one sense, no. Whoever accepts the provision made and freely offered will be saved. The condition is the acceptance of the gift—that, and nothing else. But here we meet with a second feature of Christianity by which it is distinguished from all heathen religions. The salvation it proposes is a salvation from sin and its consequences. It is a holy salvation. (This makes it impossible that the gift should be accepted unless sin be forsaken.) If any choose to call this forsaking of sin—that is, repentance—an additional condition, they can do so; but it is no arbitrary condition. There is a natural impossibility that it should be otherwise. “Doth a fountain send forth at the same place sweet water and bitter?” The same mind can no more

be dominated by two supreme and opposite principles than the same space can be occupied by two bodies. You have a casket filled with stones. I offer to fill it for you with gold ; but the casket is yours, and you must make the gift possible by emptying out the stones. By refusing, if you do refuse, to accept the only condition which renders the gift possible, you refuse to accept the gift.

But whatever may be said of repentance in the aspect just spoken of, it is certain that Christianity understood itself in its great feature as a holy religion when it gave faith its high position. The reason is that faith is not only receptive, but assimilative. Not only was man to receive eternal life as a gift, but his character was to be transformed into the likeness of the character of Christ. But without faith this would have been impossible. (Faith is not love, but it is the basis of it) and by a natural law we are transformed into the image of any one in whom we confide and whom we love. Faith, with that which springs from it, is indeed the only assimilating and elevating bond by which moral beings who are higher and purer can draw those who are below them up to their own position.

In both its great aspects, therefore, first as a gratuitous religion, and second as a holy religion, it was necessary that Christianity, if it understood itself, should give to faith, strange as it must have seemed, the prominence and the function it did. As gratuitous it was wholly new. The reception of a gift being a personal act and perfectly simple, this feature of Christianity disconnected it, in its essence, from rites and ceremonies and priestly intervention ; and so it became the new wine that needed new bottles. It became a free, untrammelled, spiritual system ; and in such a system, appealing to the individual heart and conscience and acting through them, it is through faith alone that there could be either a reception of the gift, or that assimilation to Christ which must insure individual perfection and become the bond of a perfect social state. Thus did Christianity stand forth at once in its completeness—a completeness that precluded all idea of improvement or of development. To the provision made by God for a free salvation nothing could be added ; nothing to the simplicity and reasonableness and adaptability to the whole race and to men in every con-

dition, of the mode by which men were to avail themselves of that provision. Accepting by faith the provision made by God, men would enter at once into new relations with him, and by the continued exercise of faith they would be brought into complete conformity to him. In that conformity is social unity, in that is salvation.

What, then, is this faith, so long held in abeyance, adopted at length and made thus prominent by Christianity, and capable of producing such effects? Perhaps we may best reach its nature by referring to those characteristics of it which rendered its adoption necessary in the Christian system. Of these, one, already mentioned, is its receptivity. This is referred to in the opening of the eleventh chapter of Hebrews. So receptive is it of those things of which we are assured by the testimony of God, that that assurance, which is faith, becomes equivalent to the very substance of things only as yet hoped for; and, resting as it does on the divine testimony, there is in it evidence—a demonstration, as the original word imports—of those unseen things which it would have been impossible for us to know without revelation. It has already been mentioned, too, as another characteristic of faith that it is assimilative; or, if not directly and necessarily so, yet that it is the underlying condition of all assimilative processes. (As receptive, faith involves the action of the intellect; as assimilative, of the affections.) These, lying between the intellect and the will, are manifested chiefly through them, and so the transforming power of faith through the affections, though of the utmost importance, need not be dwelt upon here. A third characteristic of faith not yet mentioned, and one which necessitated its adoption by Christianity, is that it is a principle of action. Here it involves the will, and asserts its highest claims. As receptive, it involves the will—for reception is an act—but not in the same way. It involves it as demanding energy—as acting, not merely in its function of receiving, but also of doing and giving. It is to the illustration of the power of faith as a principle of action in this aspect of the will that the body of the eleventh chapter of the Epistle to the Hebrews is devoted. It is there shown to be the great and the only legitimate principle of religious heroism. “By it the elders obtained a good report.”

•We find, then, adopted into the system of Christianity, and necessary to its working, a somewhat called faith, receptive, assimilative, and operative. Was this something new, or was it previously known and then made conspicuous by being brought into new relations? It was not new, for the New Testament ascribes to it the heroism of the ancient saints. Was it then something peculiar to the religion of the Bible, or was it a broad principle common to the race? Certainly to the race, since Christianity addresses all men and assumes that they know what faith is, and that they are capable of exercising it. What principle, then, is there common to the race, and so related to those three great constituents of our nature, the intellect, the sensibility, and the will, as to be at once receptive, assimilative, and operative? (Such a principle we find in *confidence in a personal being*, and that is *Faith*.) This, at least, is generically the faith of the New Testament, and nothing else is.

Let us test this. Of course the confidence or trust of one personal being in another may be of every degree, according to the ground of it in the person trusted, and to the relations in which they are placed. Suppose, then, the relation to be that of physician and patient, with entire confidence on the part of the patient. He will then believe what the physician may say, will take any remedy he may prescribe, and will do whatever he may be directed to do in the way of regimen or change of climate. This he will do despite the opposing judgment of friends, or of physicians of an opposite school, or even, as in the case of Alexander the Great, despite an accusation of an attempt, through the remedies given, upon his life. (He will, as Alexander did, put the note containing the accusation under his pillow, and looking the physician in the eye, swallow the draught he presents, and then hand him the note.) That would be confidence in a personal being; that would be faith. The whole would be comprised in an original act which might be called either an act of receptivity or of commitment. He might be said to receive the physician as his physician in all that he offered himself to him for, or to commit himself wholly to him for all that he needed to have done. Take, again, the case of a traveller, and one who offers himself as a guide. If the traveller accept the guide in full confidence, the forest may be dense and

pathless, he may be "turned round" so that the south shall seem to be north and the east west, and their course to be the opposite of what it should be, yet will he move on without faltering. And that is faith. So with the soldier and his commander. With full confidence on the part of the soldier, he will endure every hardship and face every danger. So, too, with the man who lends money or deposits treasure on the simple word of another, or perhaps without even a word. But the example most in point for our purpose would seem to be that of the parent and child. Recognizing the parent as his natural guardian, and confiding in his goodness and superior wisdom, the child denies itself indulgences it craves, performs tasks it dislikes, and executes commands the reason of which it does not understand. It belongs to his condition in the natural order of human beings that he should do this, and in all ages the propriety and beauty of it, its necessity even, have been recognized. And this again is faith. In this case, if the parent and child be what they should be, there will be assimilation. In the cases above mentioned this may not have been. There was receptivity or commitment as we may choose to call it, and also a principle of action, but not necessarily assimilation. This may not have been needed. But where it is needed, as in the parental relation rightly constituted, and in Christianity, it will be involved in faith as above defined. It will, however, come in directly, and not as an act of will. "Beholding as in a glass the glory of the Lord, we are changed into the same image."

In each of the instances above mentioned, it will be seen that there was a conjoint action of both the intellect and the will—of the intellect, in a belief involving some interest requiring action; and of the will, in choice and volition with reference to that action. Is, then, the essential element of the faith to be found in the action of the intellect or of the will? Of the will certainly, so far at least that the action of the will cannot be dispensed with, and the faith remain. True, mere belief is sometimes called faith in the New Testament, but in such a way as to show that that does not include all that is needed to constitute the faith it contemplates and demands. It speaks of mere belief as a dead faith, and of a faith fully

constituted as implying works—that is, acts of will. “ And by works,” says the Apostle James, “ faith was made perfect.”

In each of the above examples we have had confidence expressed in specific acts. But may there not be a general confidence while we are not as yet in such relation to the person in whom we confide as to call for specific acts; and if so, would such confidence be faith? Clearly there may be such confidence; and that it should be called faith I think is also clear, because if such confidence be perfect, it will certainly lead, when the occasion may demand them, to the performance of those specific acts both in kind and degree which all recognize as acts of faith. Thus belief in testimony solely from confidence in the person testifying would be an act of faith. The thing believed might be as improbable on every other ground as the ocean telegraph to a savage, and still, if the confidence were perfect, the belief would be firm. It would not, indeed, if it were a belief on a subject requiring no acceptance, no commitment, no obedience, be the faith of the Bible, because God (does not reveal any thing for the mere purpose of being believed.) To be the faith of the Bible, belief, whatever its origin, must pass on and up into a loving obedience, so drawing in the whole man. That our Saviour did not care what the origin might be of that preliminary belief which must underlie any rational confidence, appears from these remarkable words: “ Though ye believe not me, believe the works; that ye may know and believe that the Father is in me, and I in him.” We say, then, that confidence in a person is faith, and that this may reveal itself in belief of his word, in the commitment of ourselves to him, in the acceptance of his gifts and in obedience to his commands, and that it will reveal itself in either or all of these ways as existing relations may demand. Other grounds of belief, of commitment, of acceptance, of obedience, there may be, but unless these several acts spring from confidence they will not be acts of faith.

With this view of faith as a ground of belief and of action we proceed to find its place.

Whatever may have been the origin of this universe, it is now conceded that that part of it which falls under our observation appears to have passed to its present condition from a

state of chaos. It is also conceded that the steps taken were not at random, but that each preceding one was so a preparation and condition for that which was to follow as to be indispensable to it. Thus, since the food of organized beings is ultimately derived from inorganic matter, such matter must have been first in the order of nature, if not of time. In the same way, since the food of animals is derived from vegetables, these must have been first. (It is because the order thus required by the law of conditioning and conditioned is adhered to in the first chapter of Genesis that the account there given holds its place as accordant with modern science.) In this process a new force was added at each step upward, constituting by its uniform action what is called a physical law, and giving unity to the department controlled by that force. This continued till a being having personality was reached, and that is the highest department conceivable by us. Up to this point every thing had been governed by law of necessity, each law giving unity to its own department, and the unity of the whole being secured by the law of conditioning and conditioned, together with the fact that at each step upward every thing below was so taken up into the higher as to become a part of it. But as personality involves freedom, it is evident that unity could no longer be preserved by a law having the characteristic of necessity. No law of fixed quantities or definite forces or of reciprocal action that can be brought under a mathematical formula would now do. There must be a force acting from within corresponding with the new element of freedom. The change needed was one of method, like that which occurred when organization commenced in matter. The change, then, was from forces working from without to one, the force of what we call life, working from within. The working is still from within, but now by forces intelligently recognized and freely controlled. Constantly as we have gone up, the forces giving unity, as well as the departments and beings controlled, have been higher, until, as we reach the highest being of all, we ask for a force adapted to give unity to the realm of personality. To such an inquiry the only answer is, confidence—the mutual confidence of personal beings in each other. Evidently a mutual confidence of personal beings in each other, universal and absolute,

(would produce among them a unity and order like that which gravitation produces in the heavens. That would produce it, and nothing else would.) Is it said that love would produce it? Love is above confidence, and is conditioned upon it; but its office is to suggest and carry out those ministries which will best promote the well-being of a community united by mutual confidence.

The place of faith we thus find to be that of the uniting principle in the highest realm of being, as gravitation is in the lowest. Let either be wholly withdrawn from its department and there would be utter chaos. The difference, or rather a difference, between them is, that while any modification of gravitation would probably be fatal to the physical system, confidence may be impaired and the social system still go on, though in an imperfect way. The security which confidence would give may be partially attained by bolts and bars and weapons of defence.

We next inquire for the logical basis of faith. This is originally the same as that of our confidence in the uniformity of nature. It is instinctive. The nature of the child is preconformed to it. It draws it in with its mother's milk. (It is a part of the "heaven" that "lies about our infancy," and in a normal condition of things there would be no more distrust of persons than of the laws of nature.) But here comes in an anomaly. In nature uncorrupted there is a correspondence of instinct and object that is the life of the animal. We find no instinct that has not a permanent and satisfying object set over against it, or that uniformly needs to be corrected by experience. But here we find an instinct that is doomed to be uniformly thwarted and baffled until it becomes merged in a higher intelligence; and the spirit, grieved and indignant, learns through that to accommodate itself to a perverted and unnatural—in the highest sense of that word—order of things. It is a sad hour for an ingenuous child when the feeling of distrust first enters, and an intelligent sense of its necessity dawns upon him. What a comment, too, on the state of society when a young person, nurtured in seclusion and with uniform kindness, finds his ready confidence in new associates treated with pity and mockery, and himself subjected to forms of im-

position and indignity contrived especially to teach him what kind of a world it is into which he has come! Then may come, and often does, a revulsion, and a reversal of the impulses of a kindly nature, such as to lead on to final misanthropy. It is, indeed, interesting to trace the result of the two instincts—the one towards confidence in nature, the other towards distrust of man—as they become modified by intelligence. In nature, the constant tendency of experience is to confirm the authority of the instinct, and this tendency finds further support in scientific research. As that proceeds, exceptions and anomalies disappear, the sway of a seemingly necessitated and necessitating law extends itself more widely, till at length the scientific mind is in danger of losing its hold upon any thing higher—till, indeed, Comptism comes and denies that there is any thing higher, or if there is, that our faculties are in any such relation to it that it can be known. On the other hand, the tendency of experience with men, especially in business and in politics, is towards distrust. Few are the business men whose instinct of caution is not sharpened as more extended transactions bring them into wider and closer relations with the ingenuity of fraud and the plausibilities of deceit. Few are the statesmen or politicians long in public life who will not say with Lord Chatham, that “confidence is a plant of slow growth.” In fashionable life, even, where no great interest is at stake, insincerity and heartlessness often so reveal themselves through its conventionalisms that sensitive natures turn with relief to the constancy of brute instinct and the quiet sympathy of nature. Was, then, the original instinct a mistake? No; it bides its time, either to be lost in the utter perversion of that higher nature it was intended to undergird, or to find again its original place through the perfection of that nature.

And this possible restoration of the instinct leads us to notice an important difference there is between the logical basis of the confidence we have in the uniformity of nature and in personal beings. In the first case we have an instinct that becomes strengthened by experience and scientific observation. But if we suppose science to go on accounting for every exception, and bringing every apparent anomaly under some general law till there is seen to be perfect uniformity, and that she should then be

asked what reason she has to expect that uniformity to continue, she has no reason to give except the original instinct as thus strengthened. Of the forces which originated or which perpetuate this uniformity she knows nothing, and there would be no contradiction or absurdity if the uniformity should be broken up. It would contradict no fundamental law of belief, and no reason can be given why science should expect it to continue except the instinct, and the fact that it has continued. The instinct and the fact are absolutely the whole basis that science has to rest upon. (But as the general instinct of confidence in character is undermined there comes a discrimination of character in particular cases, and confidence from that. Character, apprehended character, supersedes a general instinct, and becomes the rational basis of confidence in persons who possess a character that will justify such confidence.) But here two questions arise—one, How shall we know, in particular cases, what the character is? the other, What is the logical basis of confidence in character when we know what it is? The first belongs to common and practical life. Of course, if we are to confide in character we must know what it is; and, liable as we are to be deceived, we do so far know and confide in it that the larger part of the ordinary transactions of life are based upon it. But while there is often great uncertainty, yet in some cases we do so know character as to rest upon it with perfect assurance. We know it as by intuition. There was in the primitive church a special gift of the discerning of spirits, and something like this we often seem to have now; so that we feel as certain of the character of some men as we do of the qualities of objects presented by the senses.

But be this as it may, in regard to man, we may know certainly what the character of God is; and knowing this in regard to any personal being, the inquiry is what the logical ground of confidence is. As has been said, we can have confidence in Nature only as she is uniform, and her uniformity can be known only by an original instinctive belief, the belief itself being based, not on any thing necessary in itself, but, like that of all beliefs depending upon instinct, upon an arrangement that may be temporary. Such beliefs, having reference to things that are made and can be shaken, are preparatory for those that have

reference to things that cannot be shaken and must remain. It is for the basis of such beliefs that we inquire, and we say that it is to be found in the stability of persons, or of a person. Confidence in persons begins, like that in the uniformity of nature, in an instinct, but, unlike that, finds at length a rational basis in *character*, which can belong only to a person. Character supposes freedom and rational grounds of action. It supposes permanence and uniformity from such grounds, and the question is how far such uniformity may be relied on notwithstanding the freedom, or rather in consequence of it.

Character is determined by the principle of action made supreme. If that principle, which is demanded by reason, by our nature as made by God, and by his revealed will—for these coincide—be made supreme, (there will be harmony within.) Only so can there be. But this harmony within himself is the first condition of the well-being of any person. For the want of it nothing can compensate. Without it any possession or acquisition, be it material or intellectual, can avail nothing. Not on what we possess, but on what we are—that is, on character—does well-being depend. This is one of the lessons that men need to learn—a fact seen the more clearly as they come up into the light of reason and see things as God sees them, till their estimate of the value of external things may at length so fall away that, if integrity of character and witness-bearing to its value require it, the loss of them all and martyrdom itself may be welcomed with triumph. Rationally viewed, all else is but as the small dust of the balance compared with integrity and perfection of character. This was the view of our Saviour. Comparing the physical universe with the value and stability of his word, he said, “Heaven and earth shall pass away, but my words shall not pass away.” Nor does the value of right character depend solely on the harmony it produces within. Social harmony depends upon it, and can be produced by nothing else. As long, therefore, as reason and conscience bear sway the supremacy of the highest principle—integrity of character—must be held fast and maintained. Once morally perfect, every reason there is in a sense of dignity and honor and purity, and interest in a regard for others, in any thing that can constitute the hope or the blessedness of a personal being, must demand

that he should remain permanently in that state. Still, man may change, angels may fall, but to suppose that God should not choose and remain permanently in the choice of that which is wisest and best would be to suppose reason, and the infinite reason, voluntarily to become unreason; righteousness, unrighteousness; goodness, malignity; perfection, imperfection. We assert the freedom of God. We do not so bind his will by his perfections as to make it fate; and yet those perfections are so related to his will that we may say with the apostle that "it is impossible for God to lie." It is a moral impossibility, and we find in it the strongest ground of confidence that we can conceive. It is then the character of God—not his nature as necessitated, but his character as based on reason and choice—that is the ultimate ground of our confidence. Here we find the rock on which the stability of all that is valuable in this universe rests, and this is the logical basis of faith in God, the faith of the Bible. Here instinct and reason coalesce and find a quiet resting-place.

Faith, therefore, does not rest on natural causes, the operation of which is conceived of as necessary. Though beginning, like confidence in the uniformity of nature, in instinct, it does not, like that, end there. It ends in intuition and judgment, and in an estimate of causes into which freedom enters as a factor. This changes wholly the logical basis, and necessitates a judgment in each case of the mode in which freedom may have modified, or may modify, character and action. Faith will then presuppose a perception by us of moral qualities in others, and that those qualities are the ground of our confidence. The sun having risen to-day, we have confidence that it will rise to-morrow. Perceiving, or thinking that we perceive, wisdom and goodness in our friend to-day, we are confident, but as we have seen on wholly different grounds, that he will be wise and good to-morrow. We are now in a different realm—the realm of personality and of freedom. To this, nature as necessitated is subsidiary, and in this the principle of order and the basis of our expectation of uniformity are different. As belonging to the realm of personality, it is in personality that they find their basis.

Resting thus for its logical basis on the stability of a rational

will, a general confidence in a personal being as true and upright, and so to be depended upon, may properly be called faith. Still it is to be carefully noticed that whenever faith would become a principle of action the confidence must be authorized by some act of will, general or special, on the part of him in whom it is reposed. We may have faith in a banker as honest and as having ample means, but if we have not been authorized to draw upon him our draft will not be honored. Revealing itself through the will in receptivity, in commitment, in aggressive action, or in suffering, as the case may require, faith must be authorized by an act of commitment on the part of him in whom we confide. We may have hope in another who has not authorized our confidence. As a last resort, we may cast ourselves upon him, as Queen Esther appeared unbidden before the king ; but this is not faith. (That, as a principle of action, is *authorized confidence*.) It is still confidence in a person, and nothing else, but in a person who has voluntarily placed himself in such a relation to us that his character is pledged for the performance of that for which we confide in him. To rest thus upon character, and *that alone*, is faith. This puts honor upon him in whom we confide as nothing else can. Without this, indeed, outward forms of respect must be either merely conventional or hypocritical. While, then, we say that confidence in a personal being, authorized by him and resting solely upon his character, is faith, it is yet not the faith of the Bible. That is authorized confidence in God ; or, if it be distinctively Christian, faith in Christ. For all authorized confidence in him the character of God is pledged. If the confidence be not authorized, it is mere presumption and folly.

From the view just taken we see at once what the preliminaries of a rational faith must be. We must first know that he in whom we confide in any particular has authorized us to do so. A man receives what purports to be the written promise of a banker, that on the presentation of that paper he shall receive a sum of money. The inquiries will then be two. First, was the paper really signed by the man whose name it bears? Second, is he able to pay the money? In ascertaining these two points faith has nothing to do. The evidence may be of different kinds and degrees on one side or on both, but

the questions are questions of fact, involving no future choice of any one, and must be decided according to the laws of evidence. But these questions being decided in the affirmative, now comes the sphere of faith. Can we confide in the banker as a man who will keep his word? Now freedom comes in, and with that moral elements; and the question will be whether the banker will value his word, his integrity, his character, more than the money. But how shall this be ascertained? It cannot be demonstrated. It cannot be proved in any such way as a past or present fact that no longer depends upon will. It can be known only through that original instinct of confidence by which we are preconformed to society, and by the rational conviction that supervenes, of the presence and permanence of principle. And yet the result may be rested in with perfect assurance. By a result so rested in the banker would be honored; but if the confidence were to rest on the same basis as the authenticity of the paper or the ability to pay, it would not honor him. These preliminary steps, as distinguished from the faith itself, seem to be indicated in that passage in the eleventh chapter of Hebrews in which it says that "he that cometh to God must believe that he is, and that he is the rewarder of them that diligently seek him." To believe that God is, is not faith; for "the devils believe and tremble." To believe that "he is the rewarder of them that diligently seek him," is not faith; for to believe this without seeking him, which is surely possible, would only aggravate the wickedness. These must be believed, but there is no faith without that act of commitment and of will by which the man comes to God.

The preliminaries of faith being then as they should be, we next inquire how far we may be rationally governed by it when it comes into conflict with other grounds of belief and of action. (This must depend on the person in whom we confide.) So it is with our faith in men. We trust them with every shade of confidence—from that which is entire to the point where confidence vanishes in utter distrust. In regard to men, then, no general rule can be laid down. Each man must use his own judgment, and trust others so far as he has evidence of their moral principle and ability to do that which they have authorized us to trust in them for. Such trust would be faith, but not the faith of the

Bible. (That is confidence in God, or in Christ as divine ; and we proceed to inquire what ought to be, and is, the value of authorized confidence in God as compared with any other ground of belief and of action)

If we accept the Scriptures, faith should be made a ground of belief and of action stronger than any other. This is evident from those examples by which the nature and power of faith are illustrated. These are such that it would almost seem as if the express object was to illustrate the supremacy of faith. Take the case of Peter when he would walk upon the water. Ordinarily, no ground of belief is stronger than that in the uniformity of nature. It is so strong that what now calls itself the scientific mind refuses to believe that any stronger ground is possible. But when Peter was authorized by Christ to step from the ship, though it was in the night, and the winds were tempestuous and the waves boisterous, he yet did it without hesitation, and as long as his faith continued the water bore him up. This act on the part of Peter was possible only on the ground of a greater confidence in the power of Christ than in the uniformity of nature. If he had known nature as we now do, it would have been a comparison of the power of Christ with that of the broadest and, measuring its power by the masses it controls, the mightiest law known. (This case is noteworthy, because the miracle is the only one wrought by Christ, if not the only one recorded in the Bible, that did not have an ulterior purpose of beneficence.) The sole object seems to have been to illustrate in the most striking possible way the supremacy of Christ over the laws and forces of nature, and to bring into direct and sharp contrast confidence in him as compared with confidence in those laws. Take, again, the case of Abraham—evidently intended to be the great example of faith for all ages. His faith was tried by the call to go out from his country and kindred and father's house ; but the test case was that in which he was commanded to offer up his son Isaac. Here it was not merely, as in the case of Peter, a permission, but a command ; and the motives opposed to obedience would seem to have been as strong as possible. Isaac was the son of his old age. In him his hopes centred. Taken by itself, the act required was opposed to natural affection, to conscience, and to the express promise of God.)

But under these circumstances the obedience of Abraham was prompt. He rose up early in the morning and commenced his journey towards the place of which God had told him. His obedience was also deliberate. There can be no pretence that it was from sudden impulse; for the journey was one of three days, and during those days and those nights—probably under the open heaven—there was ample time to ponder all the reasons that might bear upon his course. But in view of them all he did not falter for a moment. He reached the appointed spot, and built the altar, “and laid the wood in order, and stretched forth his hand, and took the knife to slay his son.”

From these examples it is plain that the Bible makes faith in God a ground of belief and of action paramount to any other. This idea enters into its whole structure and tissue, and it is vain to attempt to conceal or eliminate it. Can the Bible do this and be in accordance with reason? Was the course of Abraham rational? This brings before us the relation of faith to reason.

And here two things are obvious. First, that if we admit the being of a God who gave us our faculties—and this whole discussion supposes that—our confidence in him must, logically, be as great as our confidence in those faculties. Distrust of either would be fundamental scepticism. And, second, that confidence in God honors him the more fully as it is the more fully tested. This the Apostle Paul recognizes. Speaking of Abraham he says, “He staggered not at the promise of God through unbelief, but was strong in faith, giving glory to God.” To this principle I see no limit, so long as that which purports to be the word or command of God can be certainly known as from him. The regard of a man for his own life is not the limit, else martyrdom would be folly. So also would be all those examples of heroism through faith mentioned in the eleventh chapter of Hebrews. But in a case like that of Abraham, where the life of another is in question, and where, but for the command, every principle of our nature would be in opposition to the thing commanded, it may be a question, and has been made one, whether God can so reveal his will externally, or in any way, as to countervail his natural revelation through the faculties. This is really the only question. Could God

make it certain to Abraham that the command to sacrifice his son was from him? On this point it would be useless to argue, but it is one on which I have no doubt. Surely God could do that. To deny that he could do it would be to undeify him. Nor do I think it difficult to see how Abraham might have formed a theory of reconciliation between his conscience and his hopes on the one hand, and his performance of the act on the other. As satisfying his conscience, he might have acted, and doubtless did, on the same principle as an executive officer under law, who is not responsible for the nature or consequences of the act he is commanded to do. Be his opinion or feelings what they may, the high sheriff is bound to execute the sentence of the law, and what would be murder under other circumstances becomes a duty in his official capacity. In a sense his faith may be said to be blind, but if he has good ground for confidence in those who made the laws and tried the criminal, it is not blind, but wholly rational. Confiding in them, it is not his place to judge of specific acts. And so Abraham was, and knew that he was, acting in an official capacity as the selected head of a dispensation, and therefore could yield himself rationally, as well as implicitly, to the guidance of God. And as to the promise of God and his hope founded on that, we are told in the Epistle to the Hebrews what his theory was respecting that. Putting the difficulty in the strongest way possible before solving it, the apostle says: "By faith Abraham, when he was tried, offered up Isaac; and he that had received the promises offered up his only begotten son, of whom it was said that in Isaac shall thy seed be called, *accounting that God was able to raise him up even from the dead;*" thus showing at once that Abraham acted rationally, and that the doctrine of the resurrection was known under the Old Testament. Evidently, then, there can be no limit to rational belief and obedience so long as there is a rational ground of confidence. Without that, any thing that may be called faith is but credulity and folly. It will follow from this that a legitimate faith can never believe any thing that it is not more rational to believe than not to believe, and can never do any thing that it is not more rational to do than not to do. Of course, between faith, as thus defined, and rea-

son there can be no conflict. The faith of the Bible, the faith we are commanded to have, must always have a rational ground.

We have thus seen what faith is as a ground of belief and of action, have found its place, its logical basis, its preliminaries; we have also seen what the relative weight of faith in God as a ground of belief and of action should be, and the relation of faith to reason. It remains to state some other views that have been and are taken of faith, and also some consequences that will follow if we accept the definition above given.

That the same word should sometimes have different meanings is unavoidable, and there is no objection to it if it do not lead to ambiguity. But the word faith has been, and is, largely so used as to lead to that, and also so as to bring reproach upon Christianity. And first, the word faith is used both by philosophers and divines, with the implication and apparent belief that they are treating of the same thing, to indicate something wholly different from the faith of the New Testament. Thus Sir William Hamilton says, "Faith—belief," making them synonymous, "is the organ by which we apprehend what is beyond our knowledge. In this all philosophers and divines worthy of the name are found to coincide."<sup>1</sup> By faith he here means our belief in those first truths which we are so constituted that we must believe, and upon this belief he says all our knowledge rests. "The doctrine," he says, "which has been called the philosophy of common-sense, is the doctrine which founds all our knowledge on belief."<sup>2</sup> He does not agree with those who say that knowledge is before belief, and that we must know in order to believe; but with St. Augustine and Luther, who say that belief is before knowledge, and that we must believe in order to know. So also Dr. Christlieb: "For all knowledge is, in the last instance, conditioned by faith, and faith (*i.e.*, an act of belief) is the preliminary and the medium of every act of intelligence."<sup>3</sup> Whether it is well thus to contrast belief with knowledge where there is equal certainty, and to make the stronger word depend on that which is commonly regarded as the weaker, we need not inquire. I think not. But

<sup>1</sup> Met., sect. 38.

<sup>2</sup> Logic, sect. 27.

<sup>3</sup> "Modern Doubt and Christian Belief," sect. 2.

here is an operation of the mind that is necessary, that involves no choice, no responsibility, no commitment, and yet it is apparently, and indeed avowedly, made identical with the faith of the Bible. The thing intended in these passages I suppose to be correct, but it has no more to do with the faith of Christianity than it has with arithmetical calculations.

Again, faith is used to denote a power or faculty or operation of mind by which knowledge is gained directly with no intervention of confidence in another. Thus Dr. McCosh, after saying that there is a common property that belongs to faith in all its shades of meaning, and that that property cannot be defined, says of faith that "it is that operation of the soul in which we are convinced of the existence of what is not before us, of what is not under any sense, or any other cognitive power." And for this result he provides, as well he might, a separate faculty. He goes on to say, "It is a native energy of the mind, quite as much as knowledge is (?), or conception is, or imagination is, or feeling is."<sup>1</sup> Says Dr. Christlieb: "As an undoubting and assured conviction of the unseen, it is the organ for the immaterial world, and for our knowledge of it." But faith is not an organ; it is a voluntary operation, else it could not be commanded, as it is by our Saviour when he says: "Have faith in God." Be the subject what it may, material or immaterial, visible or invisible, no action of our faculties respecting it that does not involve confidence in another is faith. "Assured conviction" must be on the ground of satisfactory evidence. If not, we run into mysticism. But such conviction of the "unseen" must either come directly through some "native energy"—and then it has no more an element of faith in it than the result of any other native energy—or it must be through communication with another in whom we confide, and, under the conditions already specified, that would be faith. These two modes of reaching an assured conviction differ wholly from each other, and it is quite time they should cease to be called by the same name.

In view of what has preceded, little need be said of a use of the word faith, by which it is made to be belief in testimony.

<sup>1</sup> "Intuitions of the Mind," p. 450.

This is common, and approaches the true meaning more nearly than the others. Still, there are laws of evidence by which the value of testimony is weighed, and when it is believed on any other ground than confidence in the character of the person testifying, such belief is not faith. Faith and belief are related to each other as wisdom and knowledge are. Wisdom implies knowledge ; but without choice, and action from that, there is no wisdom. It is a form of action that determines the definition of wisdom. In the same way faith implies belief, but it is impossible where there is no confidence in another. It is, as has been said, the element of confidence that becomes belief ; commitment, obedience, as the occasion may require, on which the definition of faith turns. We say then in general, that no operation merely intellectual is faith, but that, as practical and operative, it implies, in connection with belief, an act of trust—that is, of will—on our part, and also, as implied in what has already been said about authorization, an act of will in the way of promise or command on the part of him in whom we trust. This last has not been generally noticed, but it is necessary to a full conception of an act of faith. Always in the Scriptures it will be found—as in the case of Abraham, who “believed God, and it was counted to him for righteousness”—that it was a belief with trust.

There is, fourthly, one more use of the word faith, in which its meaning is wholly different from any yet referred to, but in which it has been surprisingly and mischievously confused with the true meaning. That is its use with the definite article, signifying, not an act of the mind, but articles of belief—not the act of believing or any modification of it, but a creed. Of this use church history is full, and in our churches now a man is said to make confession of his faith when he assents to a creed. This use of the two words together, “the faith,” to signify a body of doctrine, is legitimate and scriptural, as when we are told to “contend earnestly for the faith once delivered to the saints.” Such a body of doctrine may be true or false, a belief of it may be reasonable or unreasonable, but any use of the word faith with this meaning in connection with discussions respecting it in its true meaning can result only in utter confusion.

It only remains to state some consequences that will result from an adoption of the view of faith now taken.

And, first, we have an evidence of the divine origin of Christianity in the fact that it signalized and adopted as so essential the principle as thus understood. Pervasive, but not obtrusive, it is, as thus understood, and only thus, the gravitation, as has been said, of the personal realm ; and would have been much less likely than gravitation to be recognized as a universal and controlling principle wherever there is order in a realm higher than that of matter. So understood, and so only, it is the only possible receptive principle in a system of gratuitous salvation. "It is of faith, that it might be by grace." It is the only possible elevating principle, when the inferior is to be raised up by the superior ; the only ground of courage and of hope where there is leadership, and must be involved in all assimilation of the morally imperfect to those that are perfect. The knowledge of all this is implied in giving to faith as now defined the place that Christianity gives it ; and yet, in accordance with the whole spirit and movement of Christianity, a discovery greater than that of gravitation was not announced as a discovery at all, and has seldom been regarded as such. For all this a divine insight was demanded.

A second consequence of adopting the above view of faith will be a clear view of the relation between reason and faith.

This is a permanent subject of discussion, but has risen at times to special prominence. This, as some may remember, was the case nearly thirty years ago.<sup>1</sup> Among the articles prominent at that time was one in the *Edinburgh Review* for October, 1849, on "Reason and Faith : their Claims and Conflicts," which expressed the views common at the time. In this the writer, seeking to give faith and reason their respective provinces, says : "In the domain of reason men generally include, first, what are called intuitions ; second, necessary deductions from them ; and, third, deductions from their own experience ; while in the domain of faith are ranked all truths and propositions which are received, not *without* reasons indeed, but for rea-

<sup>1</sup> In that discussion I took a part (see Baccalaureate Sermon for 1850), in which the definition now advocated was given. I would also call attention to an able article by Rev. Theodore Woolsey Bacon in the *New Englander* for April, 1869.

sons underived from the *intrinsic* evidence of the propositions themselves." But, seeing the inadequacy of this, he says further, "that so inextricably intertwined are the roots both of reason and faith in our nature, that no definitions that can be framed will completely separate them ; none that will not involve many phenomena which may be said to fall under the dominion of one as much as of the other." These views, or those yet more indefinite, still prevail. Says the writer of an article entitled "Faith and Reason" in McClintock and Strong's Cyclopaedia of Biblical Literature, "Faith is something more than rational belief—something more firm and assured than scientific or philosophic conviction. . . . We believe in the results of science ; we have faith in the truths of revelation. We believe that the earth is round ; we have faith in the existence of God, and in the immortality of the soul"—thus substituting, as it would seem, conviction through feeling for that trust in another which is the distinctive element of faith. Again, as showing the prevalence of indefinite views on this subject, it is worthy of notice that two men so eminent as Dr. Christlieb and Dr. McCosh, in marrying faith and reason, should make them, the one the husband, the other the wife. Says Dr. Christlieb : "Reason and faith are, in the divine order of things, destined as it were to a spiritual wedlock, in which faith shall be the masculine and productive, reason the feminine and receptive power. Faith, from the invisible world in which it lives, must bring the truths unattainable by reason and present them to her."<sup>1</sup> Says Dr. McCosh: "It is not good either for reason or faith that it should 'be alone.' The former is in itself hard, bony, angular, and, unmarried to the other, is apt to become opinionative, obstinate, and dogmatic ; the latter, without her partner to lean on, would be facile, weak, and impulsive. The one is a helpmeet provided for the other, and let there be no divorce of the firmer from the more flexible, or the more devout and affectionate from the more considerate and resolute." As showing the relations of the two, he also says that "in all the higher exercises of reason there is a large faith-element, which could be taken out of reason only with the certain

<sup>1</sup> Sect. 2.

penalty that reason would be stripped of all its soaring capacities. What could cognition say of duration, expansion, substance, causation, beauty, moral good, infinity, God, if faith were denied its proper scope, and forbidden to take excursions in its native element?"<sup>1</sup> That faith should fare hardly at the hands of men who get their impressions of it from statements so indefinite and mystical as these, is not surprising. But the distinction between faith and reason, together with the relation between them, is perfectly simple. In all cases faith is a reliance, not directly upon our own reason or upon ourselves in any way, but upon the reason, the word, the wisdom, the goodness of some other personal being, and the proper office of reason is to see that we have sufficient ground for such reliance. That is the whole of it. Having that, and just so far as we have it, faith is rational, but no farther. This at least is the meaning of faith as used in the Bible, and the relation of reason to that. For any thing that may be called faith so different from that as not to be at all the same thing, and for the relations of reason to that, Christianity is not responsible, and ought not to be made so.

3. From the above we also derive the true relation between faith and philosophy.

These differ in their nature. Philosophy comprehends ; faith trusts. Philosophy seeks for reasons and causes. Faith believes and obeys. Faith may receive the results of philosophy on trust, but, as a rational faith, can do this only as reason finds a ground for its trust. There can, therefore, no more be a contradiction between faith and philosophy than between faith and reason. When the terms are rightly understood, there is no tendency to a contradiction or conflict between them. If, however, as has sometimes been done, the word faith be used for *the* faith—the thing believed—then the question may arise whether that be, or be not, coincident with philosophy.

4. The above is the only view accordant with the present tendency to make the person of Christ, and not creeds, the centre of the Christian system, and the bond of union among Christians. That creeds have ever been avowedly made the

"*Intuitions of the Mind*," p. 422.

centre, is not asserted ; but that before and especially since the Reformation they have assumed undue prominence, and have been practically made central, cannot be denied. But according to the view now taken faith in Christ is not the belief of truths about him, but the acceptance of him as a Saviour, and a commitment of ourselves to him in all that he offers himself to us for, and in all that he requires of us. This changes our whole conception of the religion. (It makes of Christianity, not an academy for teaching, or an arena for disputation, but a kingdom for obedience and service.) It brings every Christian into personal relation to Christ, and makes his person as a source of power and an object of affection the permanent centre of the system. It thus furnishes, (in love and loyalty to him) a motive-power which every other system lacks—*the* motive-power, indeed, on which its efficiency depends. Wholly in contrast are Christ and Christianity in this with the founders of other religions and with the religions themselves. In no other religion does the person of the founder become the object of affection or the source of power. This point was often and ably presented by the late lamented editor of this Review, Prof. H. B. Smith. It is also admirably presented in an article in the May number of this Review, entitled “God’s Threecold Revelation of Himself.” In that the writer presents Christ as a distinct abiding revelation of himself by God. As expressing my own views on this point I quote a passage from one of the “Boston Lectures” of 1871. Speaking of Christianity as differing from other religions in its founder, I say : “This, it may be said, does not affect the religion. It would not if Christ had been merely a sage or a prophet. But he was more. He was the central personage in an organic and unfolding system that goes back to the beginning of history and reaches forward to its close ; and his person and work and character and claims and the facts concerning him are of the very substance of his system. (Take Plato away, and Platonism remains. Take Christ away, and you have no Christianity. Take away his person as divine, his character as sinless, his death as sacrificial, his resurrection, his ascension, and his personal relation to each of his followers as a Saviour, and you have little left worth contending about.) Christ not only made a revelation, but he was one. He was ‘the bright-

ness of the glory of God, and the express image of his person ; and Christianity differs from other religions by all the difference between the revelation which God has made of himself in Christ and any thing else that claims to be a revelation."

5. It is implied in what has just been said, but requires separate mention, that assent to a creed is not properly a confession of faith. It may or may not be an assent to what is included in "*the* faith once delivered to the saints," but it is not a confession of the faith which makes a man a Christian, or which is an evidence that he is one. The ambiguity here is unfortunate, as it has doubtless contributed not a little to displace the person of Christ from its proper central position as the bond of union among Christians. This is the bond, and the only bond ; and union through creeds, except as a creed is involved in believing *on* Christ—that is, in the acceptance of him as a Saviour, and the commitment of ourselves to him in love and obedience—is out of the question. If we suppose a Christian to have accepted Christ in all that he offers himself to him for—that is, in all his offices—such acceptance will involve certain beliefs, as when it is said: "He that cometh to God *must* believe that he is." These beliefs, whatever they are, are essential. They should be clearly seen and firmly held. Between truth and life the connection is vital. For full growth all revealed truth is needed, and in its place every point of *the* faith once delivered to the saints is to be earnestly contended for. Still, only those points which are implied in what is really a confession of faith are to be insisted on when the question respects not induction into the ministry, but Christian fellowship. But such beliefs may be imperfectly stated, or they may be mixed with others that are not essential ; and it is unnecessary, unfortunate, wrong, when either of these is so done as to be a ground of division among those who believe *on* Christ, and love him. Suppose a man to say truly, "I believe *on* the Lord Jesus Christ, and trust in him wholly for my salvation ; I love him more than father or mother, more than son or daughter, more than life, and I give myself to him in loyal and joyful obedience, to labor for the cause which he died to establish and lives to carry forward"—that would be a confession of faith ; and no belief not necessarily implied in such a confession ought to come

between him and full Christian brotherhood and communion in any church that is a church of *Christ*. It is in this direction that our hope of union lies ; and except as they are in this direction the present movements with that in view will have little value, and will have no permanence. There will be no elimination of the priestly and ambitious element in the clergy, or of the sectarian element in the laity ; churches will still tend to be merely social clubs, and work will continue to be for organizations rather than for Christ. But knowing Christ and loving him, selfishness and hate, theological hate even (*the odium theologicum*), will be displaced ; artificial barriers, ecclesiastical and social, will give way, and Christians will come to know and love each other. So will the prayer of Christ, that his followers may " all be one," be answered. So will the purpose of God as declared by the apostle be visibly in the way of its accomplishment—" That in the dispensation of the fulness of times he might gather together in *one* all things in CHRIST, both which are in heaven and which are on earth, even in HIM."

It only remains to say a word in reference to the authorization of faith in connection with what is claimed in these days in regard to special answers to prayer, the healing of the sick, and such cases as that of Mr. Müller.

And here it is to be said, first, that as the chief object of God is the sanctification and salvation of men, and as his Word is the great means of sanctification, we should naturally expect that the agency of the Spirit of God would be chiefly for that end, and in connection with the Word. And so it has been. In connection with the Word the Spirit has been abroad in the earth, awakening, enlightening, and sanctifying men ; but in general his operations on the mind have not been distinguishable from that of the truth. We know of them by their fruits, as " love, joy, peace," etc. These, according to the prayer of Christ, are produced *by* the Spirit *through* the truth. " Sanctify them through thy truth." Whoever, then, in the faithful truth of God's Word, asks the aid of his Spirit that he may so understand and apply it as to produce the fruits of the Spirit, is authorized to expect it. The promise is explicit and the fulfilment sure.

It is to be said, second, that claims to direct and conscious communication with the Spirit of God or with invisible beings

have been among the most fruitful sources of evil, and of appalling evil, that the world has known. Such claims have often been in close affinity with fanaticism and cruelty, as in Mohammedanism ; with asceticism and the rejection of marriage, as among the monastic orders and the Shakers ; and with license and free-love, as among the Mormons and in the Oneida Community. In connection with such claims the danger is imminent that some form of hallucination, some suggestion of an ambitious or an erotic imagination, will be taken for a divine voice ; and there is also opportunity for those mixtures of self-deception and fraud the results of which are often so puzzling. The moment, therefore, any one supposes himself to receive supernatural or divine communications other than from the Word of God and for the purpose of sanctification, he passes on to ground requiring great caution. He is to understand, too, that communications thus given, unless substantiated by a miracle, can have no authority except for him who receives them.

But, third, it must be conceded, at least by those who believe in a spiritual world, that there is in such communication nothing absurd or improbable in itself ; and also, unless we deny the Bible, that such communications have been made. But God is the same now as formerly—just as present and just as ready to give needed aid according to the exigencies of the dispensation, of which he only can judge. The Spirit of God is just as able to say to a man now that he shall build an orphan asylum as he was to command Philip to join himself to the chariot of the Ethiopian eunuch. God is as able to heal men now by a word or by the laying on of hands as in the days of the apostles. The question is, Does he authorize any one to expect that he will do these things ? And here all that can be said is, that every man must be left to his own judgment, and that, in the view of others, no authorization is possible except by a miracle, or by the result. So it was of old. How did Peter know that the lame man who lay at the gate of the temple which was called Beautiful would rise and walk at his bidding ? I do not know precisely how, but he knew, and was justified by the result. And so it is now. If an impulse or a voice come to a man, it comes to *him*, and he alone can judge of it. He may test it as he chooses, even as Gideon did ; but if he thinks he has sufficient

evidence that it is from God, he is to go forward. If it command him to build an orphan asylum, he is to do that ; if to say to a lame man, "Rise up and walk," he is to do that ; and if there was really a command from God, he will be justified by the result. This, however, is a field in which there will be tares ; but they cannot be rooted up without danger to the wheat, and they must "both grow together until the harvest."

MARK HOPKINS.

## THE POLITICAL OUTLOOK IN FRANCE.

HUMAN prophecies are sufficiently vain, and never more so than when attempting to cast the political horoscope of so mercurial a people as the French. It would baffle the profoundest statesmanship of Europe to foretell what is to happen to the French Government and nation when President Mac-Mahon's term of office shall expire; or, indeed, what may occur at any moment during the remainder of his incumbency. That lively French writer, M. Edmond About, draws this graphic picture: "To anybody who knows a little about centralization—that formidable machine, with its driving shafts and bands, its sharp, thickly-set, angry teeth and cogs—the French people will seem like a workman caught by his blouse, whirled up, shaken, dashed round to every corner of the building, and saved by miracle after one eternal minute of agony. He finds himself standing upright on his feet, intact in every limb, and as sound as ever he was. The accident which ninety times out of a hundred would have killed him, or at least torn and crushed him (and surely any other man but a Frenchman) has only taken, God knows why, a small piece out of his breeches. This is what we are to-day."

The 16th of May and the 14th of October, 1877, are days which index some of the most important events in the annals of modern France. Upon the former, the President, supported by the Senate and instigated by the Ultramontanists, dissolved the Chamber of Deputies and ordered a new election. Upon the latter, the people made their emphatic response to the President's call. The five intervening months between the dissolution and election were of not greater anxiety to France than of watchful interest to the other nations of Europe and to the

whole civilized world. The forces brought into conflict, and the means employed by the government to determine the political complexion of the new Chamber, plainly evinced that the civil and religious liberties of the people were thrown into the balance; and whether a Republican government should be maintained, or Monarchy or Imperialism should supersede it, was the question of the hour.

It has been charged that it was the settled purpose of the Marshal-President, during the period immediately preceding the dismissal of the Simon Ministry and the dissolution of the Chamber, to overthrow the Republic, and that these were the preliminary measures deliberately chosen for this purpose. However this may be, it is clear that the means employed by the agents of the government to prevent the free expression of the will of the people during the canvass and the election were well adapted to reach this end. But the trial by ballot frustrated the hopes of all classes of reactionists and established the Republic on firmer foundations than ever, and nothing has since occurred to disturb this happy consummation; so that the present outlook seems to be wholly favorable to the permanency of the guarantee given in October. These events are too recent to require at this point any thing more than a bare mention.

But while the posture of affairs, at this writing, gives the friends of civil and religious liberty a strong ground of hope for France, the future must, for a considerable time, be filled with uncertainty. An important crisis must occur in 1880, even if all should continue tranquil till then; and, what is especially noteworthy, there are circumstances which conspire against settled order among the French people which are scarcely found in any other nation of Europe. These claim prior attention in any just estimate of the facts of the present or in any proper attempt to forecast the probabilities of the future.

#### CHRONIC DYNASTIC CONTENTIONS IN FRANCE.

One of the chief obstacles to political progress, or to any hopeful stability in French affairs, and one with which no other nation of Europe is at present troubled, is that there are several

claimants to the throne, or to the supreme rule. Each is sustained by men of rank and influence, among whom are mingled those who hold on to the shadow of nobility, whether the old or the new, while the substance has long since departed, and each has also a considerable following among the people. First in order is the Old Bourbon dynasty, the Legitimists, represented by Comte de Chambord, claiming the title of Henry V. ; then the Imperialists, represented by the young prince, Louis Napoleon ; after him the Constitutional Monarchists, the Orleans dynasty, whose representative is the Comte de Paris ; and finally the present party in power, the Republicans, under President MacMahon.

Any one of the three dynasties would not hesitate to overthrow the Republic and re-erect the throne, without much scruple about the means to be used, were there a fair probability of succeeding and of consolidating their power ; and the Roman Catholic priesthood, at the head of their bigoted followers, would eagerly throw their influence in favor of any one of the three, believing that their ultimate objects could be more easily attained under either form of Monarchy or by Imperialism, than under the Republic. The first choice of the clerical party is the Comte de Chambord, and next to him the Prince Imperial. They could even put up with the Orleans dynasty, if they could also count upon a Senate and Chamber of Deputies inimical to the Republican principle. But so long as the Republic stands, through which the will of the people can have free expression, the hopes of the Ultramontanists will be unattainable, and their ultimate purposes, which they seek to accomplish through restored monarchy, must be held in abeyance.

It is a most instructive fact, in contemplating the history of the French people, that, from the Revolution of 1789 to the establishment of the present Republic in 1870, a period of about eighty years, there have been no less than twelve formal and more or less violent and radical changes in the supreme government of the nation.<sup>1</sup>

<sup>1</sup> Numerically stated, these twelve revolutions are as follows : (1) That which began in 1789, dethroned Louis XVI. in 1793, and brought in the rule of Danton and Robespierre ; (2) The overthrow of the Terrorists and the establishment of the Directory, in 1795 ; (3) The subversion of the Directory, in 1799, by Napoleon,

It is quite remarkable, also, and without any parallel in European history, that no ruler of France during this long stretch of years—no king, no emperor, no president; nor any ruler in any form or by any authority during the Robespiercean Reign of Terror—beginning with the dethronement of Louis XVI. in 1793, and coming down to the election of President MacMahon, has been permitted to remain undisturbed, and without encountering the waves of revolutionary turbulence; and no king has been allowed to close his reign in peace, with the single exception of Louis XVIII. He alone peacefully laid down the sceptre at the command of death, to be succeeded by his brother, Charles X.; and yet Louis was no exception to the rule of revolution, for even he, in order to give completeness to

and the inauguration of the Tri-Consulate under Napoleon, conjointly with Sièyes and Roger Ducos; (4) The New Constitution of 1800, which vested in Napoleon the sole executive power as Consul; (5) The establishment of the Empire and the proclamation of Napoleon as Emperor, in 1804, and his coronation by the Pope; (6) The overthrow of the Empire and Napoleon's retirement to Elba, with the restoration of the Bourbons under Louis XVIII., in May, 1814; (7) The return of Napoleon to imperial authority and the flight of Louis, in March, 1815; (8) The defeat at Waterloo and the banishment of Napoleon to St. Helena, with the reinstatement of Louis upon the throne in 1815; (9) The dethronement of Charles X., the immediate successor of Louis, and the assumption of the throne by Louis Philippe, in July, 1830; (10) The abdication of Louis Philippe in February, 1848, and the establishment of the Lamartine Republic; (11) The overthrow of the republic by Louis Napoleon, in December, 1851, and his assumption as Emperor, with the ratification of the Empire and his imperial authority by a *plébiscite*, in December, 1852; (12) The fall of the Empire after the capture of the Emperor at Sedan, in September, 1870, the flight of the Empress Regent, and the proclamation of the Republic in the form of "The Provisional Government of Defence," followed by the Provisional Government turning its powers over to the "First National Assembly of the French Republic," in February, 1871, which elected M. Thiers as President. In this enumeration of a dozen revolutions for the supreme rule, are barely noted the changes which were actually accomplished. Several other attempts at the subversion of the established government, issuing in blood and carnage, though unsuccessful, have been passed without mention. The three most noted in later times are: first, the attempt made by the Red Republicans, in June, 1848, after the complete establishment of the Republic, and which was "only put down after great slaughter"; the second, when the far more terrible atrocities of the Commune were perpetrated, in the spring of 1871, and which came near resulting in the sack of Paris; and, finally, the third, within little more than a twelvemonth when President MacMahon aimed to subvert republican rule and assume dictatorial powers in his own person, or prepare the way for a king or an emperor.

the picture, must be driven from the throne on the return of Napoleon from Elba, though able to assume it again. Nor can the rule of President Thiers be adduced as a fair exception. His displacement by the election of Marshal MacMahon, though bloodless and without open violence, was but a preliminary step, in the designs of the Monarchists and Imperialists, with the Ultramontanists behind them, ultimately to work the subversion of the Republic, and bring the foes of the people into power.

Now can any nation of Europe present a parallel to such a record as this? Is any one of them, besides France, seriously threatened, at this moment, by several compact dynasties (or even one), each with its ambitious aspirant, eagerly watching and studiously plotting to overthrow the established government and lay the foundation of his own power upon its ruins?

The stability of the British throne has scarcely been disturbed since the days of the Stuarts and the accession of the House of Brunswick, more than a century and a half ago. The imperial *régime* in Austria, in the line of the Hapsburgs, among the oldest reigning families in Europe, is still maintained in the person of Francis Joseph. That empire has occasionally been seriously troubled by race contentions; among the most noted in later times being the Magyar-Kossuth revolt when the democratic upheaval shook all the thrones of Europe, but at no period of Austrian history has internal tranquillity been more marked than now. Sweden, Norway, Denmark, Belgium, Portugal, and other of the smaller states of Europe, possess stable governments, and internal quietness prevails. Great changes, indeed, have occurred in Germany within a few years, in the extinguishment of several petty as well as semi-independent states; but the ruling power in Prussia, now swayed over United Germany, though lately advanced from a kingly to an imperial *rôle*, is regularly descended from the Hohenzollern family, dating its origin in the early part of the ninth century. Great changes have also occurred in the South of Europe. Several small states have been incorporated into United Italy, so long the fond vision of Mazzini and Garibaldi, although not realized in the form which they would have chosen. In this Italian union the "States of the Church" have been absorbed

and the temporal power of the pope is no more. Spain, it is true, has been somewhat torn by intestine commotions, amidst contentions for the throne and abortive attempts to establish a republic ; but these troubles appear to be quelled, and the young King Alfonso has entered upon his reign with fair hopes of assured peace at home as well as in the "Pearl of the Antilles."

France stands substantially alone among European nations as having been in the throes of political convulsion for nearly a century, with almost no furlough ; and, although we have hope from the present that the future has a brighter prospect, it is yet too soon to affirm that France has passed the dead point of danger. There can be no well-grounded confidence in assured political stability in France until the crisis which must come in 1880 shall have been reached, when the direct question will present itself : Shall the Republic be perpetuated, and in what form and manner ; or shall the will of the nation be disregarded, and priestly craft and kingly pretensions be allowed to supplant it ?

#### RACE DIFFERENCES AMONG THE NATIONS.

Another feature of French affairs which stands in open and significant contrast to the condition of many other European nations, and which ought naturally to contribute to internal peace, is, that France contains, for the most part, a homogeneous people, speaking a common language, and largely possessing the same religion. On the other hand, several other nations, whose internal tranquillity contrasts strongly and most favorably with France, are made up of peoples of different races, speaking different languages, with dissimilar manners and customs, and separated into rival religious sects.

For illustration we have merely to observe the theatre of the recent Russo-Turkish war. The prime difficulty of the Eastern Question, the long-standing trouble to all Europe—that indeed which makes it a question at all, and one which so persistently baffles all attempts at satisfactory and permanent settlement—lies mainly in diversities of race, language, and religion, along with the varying and conflicting habits, manners, and customs, which such diversities always imply, among the numerous peoples inhabiting the several provinces of European Turkey, the

chief scene of the contest. The same is also observed, only in a somewhat less degree, in the eastern section of the theatre of war, Armenia, and other portions of Asia Minor. Indeed, nearly all the former wars between Russia and Turkey, as well as between Turkey and several other European nations, covering the period from the Mohammedan invasion of Europe, hundreds of years ago, and embracing the more recent Crimean war and the late contest between Russia and Turkey, had their origin mainly—when we search for the radical underlying cause—in these manifold diversities of race, language, and religion. This is the real key to the solution of the vital difficulty at the present moment.

Lord Derby, who resigned his place in the British Cabinet in April last, mentions this race-conflict as lying at the bottom of the long-standing troubles in Western Turkey. In his speech in the House of Lords, on the eighth of April, he incidentally touches upon this race-question as follows :

“ Grant that we should be more fortunate—that we were successful, and obliged Russia to give back nearly all she had taken. What then? You will not have gained the greater part of your object. You will not have destroyed Russian influence, or substituted English influence, because Russian influence in that country which is now to be called Bulgaria rests only in a slight degree upon military success; it rests on what you cannot take away—identity of race, community of religion, similarity of religion, traditional historic sympathies, and the common hatred which has been felt against the common foe. These are reasons which you cannot take away: they will continue while a Russian soldier is left in Bulgaria—they would continue even after Russian soldiers had left, and English soldiers taken their place. If, therefore, we were fortunate, and established English and Austrian authority over those large populations in European Turkey, I say you are fighting for a shadow, and even that shadow you will not obtain. In the next place, situated as Austria is, she would hesitate before embarking on any thing which might be regarded as a rash policy, and would hardly come to a rupture with Russia unless she were previously assured of the support, or at least the neutrality, of Germany. Her population, too, is divided into a great many races, and, in fact, Austria is a country which a single unsuccessful campaign might not impossibly break up. Then you have to look to the internal divisions of the Empire. No doubt the Magyars have strong sympathies with Turkey, but a directly opposite view is taken by the Sclavs. Then you have the Austro-Germans, who want only peace. With two independent nations pulling different ways, with an army which could not be trusted to fight against the Sclavs,” etc., etc.

The illustrations of the same kind, found in Austria and Germany, greatly strengthen the view taken. The internal disturbances of the Austrian empire have grown far less out of the wish of the old Bohemian and Hungarian provinces to regain their ancient regal independence, on mere political grounds, than out of the natural diversities of race, language, and religion existing in those provinces. The same thing may also be seen in Germany. If the desire to consolidate the whole Germanic race into one empire, with other races eliminated, were realized, the map of Central and Eastern Europe would have to be materially reconstructed. On this principle, the rich and fertile provinces of Alsace and Lorraine, vibrating like a pendulum between France and Germany, now belonging to the one and now to the other, would be completely disorganized. As to Alsace, German never ceased to be the language of the people, but all newspapers were, during the whole period of the French possession, printed in both languages. In respect to Lorraine, the inhabitants are of German origin, but speak the French language, with the exception of the district lying between Metz and the Vosges, which is called German Lorraine. So, also, the Austrian Empire would be seriously dismembered if obliged to relinquish her German peoples. It would be still further dismembered on the formation of all the Slavonic peoples into a distinct government; and somewhat further, again, with the complete breaking up of the Turkish Empire in Europe, in the purpose to form a separate nation of all the Greek provinces.

It is the intermingling of so many distinct races in the same nation, with the conflicting interests which this intermingling causes, which so largely lies at the bottom of existing alienations and forms the germinal causes of war. When these races, moreover, are obliged to encounter, on the one side, the bigotry, hatred, and utterly irreconcilable hostility of Mohammedanism—no matter what may be arrayed against it—the world beholds these elements of contention in their boldest relief, ready to be fanned into the flame of war on the slightest provocation.

One of the wise provisions, therefore, of the Treaty of San Stefano, presented as the preliminary basis of peace between Russia and Turkey, was that which fixed a short term of years

for the Mohammedan population to withdraw from Bulgaria ; thus opening the way for a more homogeneous population in the future, within the territory of that province. The road to permanent peace, in this commendable purpose of the Czar, lies in the separation of these alien races.

Prince Gortschakoff, in his elaborate reply to the equally elaborate despatch of Lord Salisbury, published in the early part of April last, speaks of these race-differences as largely shaping the Treaty of San Stefano, and as constituting some of the grave difficulties in the way of an arrangement satisfactory to the European nations immediately concerned. Lord Salisbury, remarking upon " the articles erecting the New Bulgaria," as constituting " a strong Sclav State, under the auspices and control of Russia," says :

" It will be so constituted as to merge in the dominant Sclav majority a considerable mass of population which is Greek in race and sympathy, and which views with alarm the prospect of absorption into a community alien to it not only in nationality, but in political tendency and in religious allegiance. The territorial severance from Constantinople of the Greek, Albanian, and Sclavonic provinces which are still left under the Government of the Porte will cause their administration to be attended with constant difficulty, and even embarrassment."

Prince Gortschakoff makes answer to these criticisms of Lord Salisbury, in the course of which he says :

" The delimitation of the State of Bulgaria was indicated only in general terms. The sole fixed principle laid down is that of the majority of the population, and certainly it is difficult to imagine one more equitable or more rational. It meets the objections deduced from the difference of race of the minority, the interests of which have, moreover, been guaranteed by express stipulations ; but the application of that principle has been reserved for the Mixed Commission, the local investigators of which can alone dispel all the uncertainty surrounding these disputed questions." Speaking of some " new arrangements," the prince specifies among others, " the abolition of the tithes, and their replacement by a more normal impost ; the abolition of the farming of the taxes, the principal source of abuses ; and, finally, the right assigned to the Christians in mixed localities to challenge during the elections such Mussulmans as are known to have been guilty of acts of fanatical persecution against the Christians." Then in regard to Epirus and Thessaly, the prince speaks as follows : " The assertion that the Treaty of San Stefano would extend Russian influence beyond the limits of Bulgaria by stipulating for improved institutions in Epirus and Thessaly occasions surprise. If Russia had made no stipulations in favor of these provinces she would have

been accused of sacrificing the Greeks to the Slavs. If she had stipulated for the vassal autonomy that is censured in the case of Bulgaria, she would have been accused of entirely destroying the Ottoman Empire and of establishing Russian influence there. The Imperial Cabinet has always understood the mission assigned to it by history as protector of the Christians in the East, without regard to race or sect."

Other illustrations to the same effect might be given among existing European peoples. It seems to be the natural order, and that which conduces to the greatest internal harmony and prosperity in a nation, that its population should be substantially one in race, language, and religion, so far as this is practicable; and it contributes still further to this end where there is no marked dissimilarity in social habits, manners, and customs. The good which comes from laudable rivalry among races, where there is competition from opposite and conflicting interests, may better be realized in separate nationalities, side by side, than by mingling hostile races in the same nation and under the restrictions of the same laws.

Now turn to France. Notwithstanding these great diversities of race-interest in Central and Eastern Europe (which, when leading to internal conflicts, have for the most part sought to secure local reforms), we find there far less of violent war upon the supreme rule than in France. This foremost state of Western Europe is the country, of all others, of incessant revolutions to subvert the supreme authority, without regard to what party, for the nonce, may be in power; while at the same time it is, for the most part, not subject to the diversities so widely spread through the Central and Eastern European nations. Instead of being divided by race, religion, and language, its 38,000,000 of people are substantially one. Its homogeneity, in regard to these radical and vital elements, is more striking than that of almost any nation under the sun. The people of the United States are far more diversified in these respects. The English, the Irish, the Welsh, the Scotch, in the British Isles, are farther apart. And yet France is emphatically the land of revolutions. Paris, the most brilliant capital of Europe, is the city of barricades. This sunny land, with its homogeneity, is at perpetual strife concerning its rulers. What is the solution? It is not found, as already observed, in different race-interests, or diversities of language, for these scarcely exist.

The French language is the language of the French nation. No account need be taken of the *patois* of the provinces. The difference between this and Parisian French is not greater than the differences in speech which mark a well-bred citizen of London and an inhabitant of Yorkshire or Northumberland ; or than may be heard in the American Congress when listening to a colloquy between an educated "Southron" and a cultured member from New York or New England. Nor need regard be had to the partial prevalence of the German tongue in the Rhenish provinces of France, nor to the Italian in districts on her southern border. Substantially, the people throughout France speak the French language and are of the French stock. It is the same in great part in regard to religion. The people of France are, practically, and especially for political influence and power, possessed of a common religion. The Roman Catholic population is over ninety-four per centum of the whole.<sup>1</sup>

Nevertheless, in the face of the fact that the French nation is made up of a homogeneous people, in these vital elements, which should insure compactness, internal harmony, and peace ; removed thus from many of the causes which naturally tend to strife within other nations—France has stood for a hundred years, and stands to-day, the most disturbed nation in Europe. With its 38,000,000 of genuine loyal Frenchmen, every one, and with its unparalleled resources, its eminence in the arts and some of the sciences without a rival, its almost incomparable productiveness in agriculture, unsurpassed and even unequalled in certain lines of manufactures, with its world-wide military prowess and renown—all of which ought to conspire to national

<sup>1</sup> The best authorities give the following statistics : Population of France, 38,000,000. Divisions as to religion : Roman Catholics, 35,734,667 ; Jews (including Algeria), 185,000 ; Protestants (embracing the Reformed, Lutheran, Anabaptists, etc.) 1,561,250. At the beginning of the Revolution of 1789, the annual revenues of the Church amounted to 150,000,000 of livres, and its debts to 133,000,000. In 1873, the state appropriated for the maintenance of religion—to the Roman Catholics, 51,500,000 of francs ; to Protestants, 1,400,000 ; to Jews, 273,000 ; to Mohammedans in Algeria, 500,000. In 1789, the state seized for itself the funds of the Church and assumed the responsibility of maintaining public worship. This responsibility has since been recognized under all the changes which the National Government has undergone. Besides the sums annually named in the "budget" to maintain religion, the departments are charged with special annual subsidies, which amounted in 1868 to upward of 717,000 francs. Of late years these have considerably increased.

solidity, pride, and glory—France stands to-day the most unsettled nation of the world, in regard to that in which all classes of the people are supremely interested—the stability of the National Government.

There are, most clearly, reasons for this peculiar characteristic of the French people which deserve the most profound consideration, whether or not they can be readily and satisfactorily determined. In some respects they appear to lie upon the very surface of their every-day national life, while in others they elude the grasp of the ablest writers on political philosophy.

Before attempting, however, to solve the problem, it may be profitable to look at the French nation in some other important matters, as regards its relation to the other nations of Europe.

#### FRANCE AS A MILITARY POWER.

No nation of Europe has any important standing among those that rule in Continental affairs, unless it rank high as a military power; at least, no nation, without this qualification, can be classed among the "Great Powers." The doctrine of ancient Sparta, deeming every man but made for the state, and developing the whole body of the people into a condition of the greatest military efficiency as the state's highest aim, is the common national sentiment of Europe. This has never been more emphatically true than at the present moment. No advance which has been made within a few years, in the peaceful arbitrament of international questions, has had the effect to lessen the attention which transatlantic nations have given to studying the art of war and improving its implements and appliances. The first general order, in European affairs, is large and well-appointed armies.<sup>1</sup>

It is, however, comparatively a recent thing that the principle has been adopted and enforced among European nations to consider every man a soldier, unless for special reasons personally disqualified, and (with the rigidity now enforced) to

<sup>1</sup> Sir Garnet Wolseley, of the British army, in a late number of the *Nineteenth Century*, speaking of the military spirit of Europe, in regard "to the wants and requirements of the army," says: "Its interests and welfare are recognized as the first national consideration; the rights of the individual are regarded as of secondary importance."

require him, within a given period, to spend a certain term of years in actual service in the army. Professor Goldwin Smith lays to the charge of Napoleon "the portentous development of the military system under which the world now groans," by reason of the wars which he prosecuted, with very little intermission, for some twenty years. But it was not till since the Franco-Prussian war, terminating in the capture of Paris in 1871, that France began to take those measures for the reorganization of her military system which would put her armies upon something like the same basis of efficiency which had been attained by the armies of Prussia. Nor, again, had Prussia even taken the incipient steps for developing the system which now places her at the head of the military powers of Europe until within about the decade ending in 1859.

Sir Garnet Wolseley, one of the best English authorities in military affairs, holding a prominent position in the English army, writing within the last year, says: "The army of Prussia, which is now the admiration of the world, had not, in 1846, shown any sign of its coming greatness. As a military power Prussia had been crushed by Napoleon at Jena, and was forced to accede to stipulations which the conqueror believed would prevent her again, at least in his time, from appearing on the battle-fields of Europe." But notwithstanding Napoleon's belief, "Jena was avenged at Waterloo;" and yet, "from 1815, to 1849, and even to 1859, such was the fate in a great measure of the Prussian army, that it made a feeble figure in European contests." Although Prussia turned out an army that invaded Bohemia in 1866, and moved with such celerity and power against the Austrian armies as to astonish all Europe, yet, says Sir Garnet Wolseley, "most of us can remember how humble was the rôle played by that country during the Crimean War; and many can recollect, a little further back still, the stormy epoch of 1848, when the Imperial crown of Germany was offered to Prussia's king by the Revolutionary Diet. Why was it refused?" "Austria's demeanor was not to be mistaken. She would not permit it, and by a strong army massed along the frontier of Prussia said to the latter, 'Accept that crown, which I claim as mine by right, at your peril.' The king could not accept the challenge, *because his army was unfit for war.*" "The great reforms that changed the whole character of the

Prussian military forces, converting them from a *Landwchr* into an army, began in 1859."

Previous to the trial of strength between France and Germany in 1870-71, the former, in the common judgment of the world, would have been regarded as the first military power in Europe. It was the prevalent sentiment, judged by the usual organs of public opinion on both sides of the Atlantic, that the French armies would have an easy, or at least a triumphant, march into Berlin. That Paris would be besieged, the government be made to flee, the vast population of the gay capital be completely encompassed by the German armies, so that no communication with the outer world could be had except by balloons and carrier-pigeons, and that this population would be reduced to the starvation point, and thus a capitulation be enforced, within so short a period—these marvels were not anticipated by the most sagacious of those who make military matters a study.

The details of this remarkable campaign, from the declaration of war by the French Emperor to his capture at Sedan, the surrender of his capital and the establishment of the Republic, have too recently occurred and are too well impressed upon the public mind to need any thing more than a reference to them here. This reference, with the recall of the memorable campaign of Prussia against Austria, only four years before—when within six weeks of the outbreak of the war to the final battle of Sadowa, the Prussian armies had crushed the power of Austria, and, with no other opponent, could have easily entered Vienna—is simply to indicate more vividly the present tendencies of the military spirit among the several nations of Europe.

Since these victorious campaigns by Prussia, though in some instances beginning a little earlier, the whole system of the military organization and equipment of the European armies has been revolutionized, together with vast advances made in improving all the appliances of war. This is most emphatically true of France. She remembers, with keenness of anguish, her humiliation by Prussia, single-handed, in 1870-71, and she is straining every nerve in preparing to avenge it.

A distinguished American statesman, residing in Paris during the whole of General Grant's presidency (and the President's personal friend), embracing the period of the Franco-Prussian war and the subsequent six years, was asked by a leading Ameri-

can journalist whether France were preparing for a war with Germany. His reply was : " She is biding her time, but she is not losing a minute. She is using all her resources to put her army on the very best footing, and when the time shall come there will be such a clash of arms as the world has never seen."

It is now an interesting question, What actual military strength does France at this time possess, as the result of recent changes, and what will be her effective military power in the near future, when the system inaugurated in 1870 shall have been carried forward to completion ? Sir Garnet Wolseley makes the following estimates, here given in totals, avoiding his numerous details. " On the first of January, 1878," says he, " the total strength of the active army of France will be seven hundred and nineteen thousand non-commissioned officers and men ; or adding the officers (26,499), the grand total will be, in round numbers, seven hundred and forty-five thousand of all ranks, not including the *gendarmerie*, or *Garde Républicaine*, which together amount to twenty-seven thousand men." He speaks, in addition, of a " reserve," which was " created by the law of 1872, but which will not be in existence in its complete form until the end of 1881," but of which, he says, " it may be safely assumed that the reserve actually available at this moment amounts fully to five hundred thousand soldiers, who have all been trained in the regular army." Further, of this reserve he says : " When it has reached its normal strength in 1886, it will consist of five hundred and ninety-four thousand men, allowance being made for all casualties." Again : " When this reserve has reached its normal strength in 1892, it will number six hundred and thirty-eight thousand men." The summing up is then as follows, for the year 1892 :

" Active army.....	719,000
Reserve of active army.....	520,000
Territorial army.....	594,000
Reserve of Territorial army.....	638,000
 Total.....	 2,471,000"

The foregoing figures furnish the ground for Sir Garnet's statement concerning French politics and French military affairs, that " the struggle for power by the several political

parties into which France is divided has not in any serious manner hindered military progress ;" that " the direction and management of army affairs have been kept distinct, and outside the realm of party faction ;" and also, " that whilst our attention has been mostly directed to the noisy struggles between those political factions who howl themselves hoarse at Versailles over questions of parliamentary procedure, the military direction, which politics have not been allowed to interfere with, has been steadily and seriously employed in creating a great and powerful army. That it does not yet equal that of Germany, and cannot fully do so for about another ten years, is without doubt ; but it is quite true, remembering the greatly increased power now possessed by the defence, that France has no reason to dread any German invasion in 1878, even supposing that those desirous of crushing her could succeed in uniting what is now known as Germany with that object in view." Such, then, is the condition of France as a military power.

#### PECULIAR CAUSES OF THE PAST AND PRESENT STATUS OF FRANCE.

And now, to come back to the point reached before introducing the view of France as a military power, it becomes most important, in order intelligently to consider the real outlook for either the immediate or more remote future of France, to inquire, What are the latent and operative causes of the peculiar condition of France among the European nations, which have given this people such a remarkable history for a century past, and which present France to-day as the theatre of more internal turbulence and partisan contention, aimed by several powerful factions to subvert the supreme government, than are found in any other nation in Europe ? At first blush it would seem that this ought to be a problem of easy solution ; and yet sagacious men are by no means agreed in judgment upon it.

Among recent writers, the views of Professor Goldwin Smith deserve attention. He has devoted some thoughts to this very theme. He apparently evinces some prejudice, quite common with a large class of Englishmen, when dealing with certain phases of French character and French politics, especially when touching any thing allied to the name Napoleon,

reminding one of the marked prejudices which pervade Sir Walter Scott's Life of the great captain. But, nevertheless, his observations are valuable.

Professor Smith, writing but a few months ago, and speaking of the struggles of France "to attain a settled form of constitutional government," says that "apparently she is farther from it now than she was in 1787." While this is "apparently" the situation, he indulges the "hope that it may not prove so in reality." He notes the causes or reasons for this, and it is to them that attention is now asked.<sup>1</sup>

The first which he names is the cultivation of the military spirit and the predominance of the military power. Referring to the crisis of 1789-93, and the years immediately following, which dethroned and executed Louis XVI., brought in the reign of the Terrorists, who were in turn overthrown and a constitutional Republic formed, he says :

"It was by military violence, however, that the Constitution was at last overthrown, and its fall was the beginning of that supremacy of the army which unhappily has been from that hour, and still is, the fundamental fact of French politics. The hand which, at the bidding of traitors in the Directory, dealt the first blow, was that of Augereau, but the hand which planned it and dealt the final blow was that of Bonaparte. In estimating the result of the first experiment in republican government this must always be borne in mind."

After noting "the effects of Napoleon's career" as a "revelation of the weakness and meanness of human nature," he further speaks of this career "of evil" as evincing "the ascendancy given to the military spirit and the example of military usurpation." He regards "the military spirit" as further "excited by the flagitious writings of Thiers, weakly flattered by the House of Orleans, and which overturned the constitutional government of 1832." He charges to the same account the usurpation "by Napoleon's reputed nephew," which made him emperor, and to the same again, "with the influence of his priest-ridden wife," the final downfall of the empire in 1870-71. Then, coming to the crisis of 1877, the same military

<sup>1</sup> The quotations upon which comments are here made are from an article by Professor Goldwin Smith, in a late number of the *Contemporary Review*, entitled "Ninety Years' Agony of France."

ascendancy has the sole credit of threatening civil convulsion and attempting the overthrow of the Republic :

" But even now, France, after all her efforts and revolutions, is, to a fearful extent, at the mercy of a stupid and self-willed soldier, a third-rate master even of his own trade, totally devoid of political knowledge and of sympathy with political aspirations, but at the head of the army, and, as his language to the soldiery on the eve of the elections proved, sufficiently wanting in the true sense of honor to admit into his mind the thought of using the public force with which he is intrusted for the overthrow of public liberty." And finally he adds : " Two years hence, if not before, there will be another crisis ; and it is idle to conceal the unhappy and ignominious fact, that the decision will rest ultimately with the army and with those whom the army obeys. . . . How the army can be placed in safe hands is a problem of which it is impossible to suggest a complete and permanent solution. The reduction of its numbers by the definite adoption of a pacific policy is the only real security for the continuance of political liberty."

It would be worse than idle to overlook the patent fact that the military power has been a most important factor in the numerous revolutions in France for the last ninety years. But it is an equally palpable proposition, that the military power in any nation is never moved without a purpose ; never is handled for the attainment of a given end unless prompted by some idea behind it ; and whatever that idea or purpose may be, whether for enslaving or freeing a nation, or for maintaining its status, it is this underlying sentiment which must be held responsible, and not the mere fact of the ascendancy of the military power and that it has been successfully exerted. It is an equally palpable proposition, and illustrated in French history many times during the very period of ninety years upon which Professor Smith comments, that the military power was not used solely in the interest of usurpation and for the subversion of public liberty. Notably it was employed for securing and maintaining the liberties of the people as well as for overthrowing them. Napoleon was undoubtedly an ambitious usurper, but in dispersing the French Directory in 1799, he dispersed, in the persons of some of its leaders, as precious a set of villains as ever trod the soil of France. So, also, on his return from Elba he displaced the Bourbons under Louis XVIII., sending them, indeed, into a very brief retirement ; but still, whatever may be said of his own reign, Bourbonism then, as now, was but the

synonym for almost every thing which is hostile to the best interests of the people, and ever has been the avowed enemy of public liberty. And what but the French army put down the Red Republican rabble, whose true spirit cropped out in the scenes which soaked Paris with blood during the so-called "revolutionary era" ushered in during 1848? And what, again, but the army, under the wise statesmanship of M. Thiers, saved Paris from complete destruction during the terrific scenes of the reign of the Commune in the spring of 1871?

But passing the foregoing considerations, the obvious question arises, on the basis laid down by Professor Smith, Why has the "military spirit" been so disastrous to France above all other examples? All the chief nations of Europe are military nations as well as France. They have been so during all their history; they are pre-eminently so to-day. The cultivation of "the military spirit" and the practical development of its power are the conditions of their existence. This is becoming more and more the case as time rolls on. The armies of Europe, in this present year of grace, are far larger than they ever were before, and these armies are peculiarly fostered and are constantly increasing in numbers and efficiency. Nor is France, even now, in this regard, the equal of some of them. Russia and Germany lead her in this *rôle*.<sup>1</sup>

<sup>1</sup> General Emory Upton, of the United States Army, who was commissioned by the United States Government to visit Europe and Asia, on a tour of military inspection, in his official report on "The Armies of Asia and Europe" gives the following figures in totals, showing the present war strength, in officers and men, of the armies of Russia, France, Germany, Austria, Italy, and England: Russia, 1,807,950; France, 1,730,000; Germany, 1,340,908; Austria, 1,043,351; Italy, 886,722; England, 228,624. Speaking of England, General Upton says: "The basis of the English system rests on voluntary enlistment, carrying with it in time of war the payment of large bounties." (Page 252.) He also makes this comparison respecting the infantry force of the several countries named, which will be of interest in the present condition of European complications: "The force of British infantry, available for aggressive purposes, adding 20,000 drawn from the Mediterranean and India, would approximate 100,000 men, and in this number would be included the greater part of the reserve recently created. In contrast with this force, the infantry of the great Continental powers, organized on the expansive principle, can be raised, in round numbers, to the following war footing: Austria, 545,000; France, 700,000; Germany, 495,000; Russia, 674,000." (Page 269.) Sir Garnet Wolseley makes a much better showing for England, in an article on "England as a Military Power," in a late number of the *Nineteenth*

But yet this is the incontestable fact, that while France has been rent and torn by revolution upon revolution for a hundred years, and while there is even now abroad over the whole civilized world a greater or less feverish anxiety that a movement may occur at any moment to subvert the supreme authority and inaugurate another rule—by, perhaps, the Marshal-President being induced to resolve upon a *coup d'état* to overthrow the constantly strengthening republican power—France stands solitary and alone, upon the European continent, looking back upon such a history and confronted with such a danger. The dynastic factions, rival and contending within her borders, are not completely put to flight by the later decisive triumphs of republicanism ; they are neither dismayed nor disheartened ; but believing their rights founded upon the divine commission and to be realized in the accomplishment of the divine purpose, they are but biding their time and waiting the fitting opportunity to assert them. No other nation in Europe is in a condition parallel to this.

Professor Smith, it is true, presents other reasons for the “ agony” which France has endured for ninety years, but “ the fatal ascendancy of the military spirit” is the chief. “ Another adverse force,” he declares, “ against which free institutions have to contend in France, too often noted to need more than recognition in its place, is the tendency derived from the old *régime*, but handed on in an intensified form by the Bonapartes, to administrative centralization.”

Mr. Henry Thomas Buckle also takes much the same view of this power of “ centralization.” Speaking of what occurred in the fourteenth century, he says : “ But in that same century, in France, the protective spirit assumed a new form ; the power of the aristocracy was, in a great measure, succeeded by the power of the crown ; and there began that tendency to centralization, which, having been pushed still further, first under Louis XIV., and afterward under Napoleon, has become the bane of the French people.”<sup>1</sup>

*Century.* He says : “ Were war declared to-morrow about four hundred thousand drilled men would fall into line, if required, supported by three hundred and seventy-two field guns, manned and horsed by the Royal Artillery ;” and he puts down the total of all arms of the service at “ 414,000 men.”

<sup>1</sup> Introduction to History of Civilization in England, p. 450.

Unquestionably this power of “centralization” is great. That “Paris is France” long since passed into a proverb which is still true in more senses than the political. In politics the government is France, whether its seat be Paris or Versailles ; but this is becoming less true every decade. The political power, under present tendencies, is extending to other large cities, to the provinces, and to the whole body of the people. But allowing what we may to “centralization,” it fails to account for the solitary position of France, in the aspect mentioned, among European nations. Centralization rules in Germany, in Austria, and an autocracy rules in Russia ; and yet these empires continue to possess stable governments. “Administrative centralization” no more satisfactorily accounts for the present dynastic watchings and contentions for the French throne, nor for the revolutions which have so often upset it, than does “the ascendancy of the military spirit.”

“Divided sovereignty” is another of Professor Smith’s reasons to account for the troubles of France. Under this head many of his observations display sound political philosophy, and are of great value ; but this as a reason for the peculiar history and present perils of France, though having a degree of pertinency to past times, is no more satisfactory as a full solution than the others. “The framers of the French Constitution of 1789,” says he, “attempted to divide the sovereign power, leaving a portion of it in the king, and vesting the remainder in the representatives of the people. The inevitable result was collision, and soon a conflict which, though neither party knew it, was essentially internecine. The weaker, that is to say, the monarchy, fell ;” and then came “foreign intervention, adding to the fury of the conflict ;” followed by the “reign of violence and terror, and after the terror, military dictatorship and despotism. The same fatal situation was reproduced under the restored monarchy.” The professor finds again “the same fatal situation” in the reign of Charles X., who “made a desperate effort to cut the knot and render himself sovereign.” Under Louis Philippe, “what power he retained was retained not of right, but by personal influence and corruption.” Coming down to the present time, he says, “Now again comes a nominal Republic, but unfortunately there is still a king, and the hopeless problem of carrying on government with a divided sovereignty presents

itself afresh. The marshal, having the command of the army, and being supported by those who desire a return to monarchy, struggles for the sovereign power ; and the question of the late election was whether that power should belong to him and the ministers of his personal choice, or to the nation."

It seems sufficiently easy to test the value of this "divided sovereignty" as the theory which accounts for the peculiar troubles of France, by a reference to recent and well-known facts. If this is the potent factor in these troubles, why did things move on so successfully during the illustrious presidency of M. Thiers ? The sovereignty was lodged then just where it is now ; but the friends of the Republic had no fear of its overthrow while M. Thiers was in power, so far as the President was concerned. This fact is all the more noteworthy when it is remembered that the whole history of this illustrious statesman shows that his sympathies were, on principle, with constitutional monarchy, rather than with republican government. His course during his service in the cabinet of Louis Philippe shows this plainly, and it is also shown elsewhere.<sup>1</sup> But yet M. Thiers was the spontaneous choice of the better spirit of the nation after the Second Empire fell. Just so long as he retained power the Republic was deemed secure ; while his administrative tact, energy, and unexampled success, in putting down the Commune, making peace with Germany, and paying off the enormous war indemnity which Germany imposed, and within a period which astonished the world, combine to enroll his name among the highest benefactors of France.

If "divided sovereignty" has been the essence of peril, from 1787 downward to 1877—and it was the same under President Thiers as it is now under Marshal MacMahon—or if this was even a prominent factor in the case, why were the three eagle-eyed dynasties, equally hating the Republic, without any one of them seriously expecting to succeed it, agreed in removing M. Thiers and choosing Marshal MacMahon ? It is not enough to say that Marshal MacMahon is what M. Thiers was not—a soldier—and that it was to bring the military power again into ascend-

<sup>1</sup> Odilon-Barrot speaks of the sympathies of M. Thiers, in this regard, when sought to take office under the Second Empire : "All the monarchical chiefs, Molé, Thiers, Berryer, Montalembert, the Duc de Broglie," etc.—*Memoirs of Odilon-Barrot*, p. 181.

ancy that the change was made. There was something behind this change which Professor Smith does not hint at, which evidently inspired it ; but a notice of this, for the purpose now in hand, must be deferred to a later point in this article.

One remaining element of danger which Professor Smith names to account for the perplexities of France, operating before in her history, but especially pregnant with evil now, and closely allied to and growing out of this "divided sovereignty" is the "power of dissolution" of the Chamber of Deputies, possessed by the President and Senate, and to be exercised at their discretion. It was the exercise of this power in May of last year, in dismissing the Simon Ministry and dissolving the Chamber, which brought on the crisis, from the sad effects of which the nation has not yet fully recovered.

A sufficient answer to this "dissolution" theory is found in two things. First, this power is possessed by the British Government, and is held to be a valuable feature of the British Constitution ; as well as possessed, also, by other European governments where constitutional legislative assemblies are established. The British House of Commons, at the discretion of the sovereign, may be dissolved and an election ordered, whenever the Ministry are outvoted. Or, as another expedient, the Ministry may be changed and the Commons remain, if the sovereign so elect. It is true that Professor Smith holds this British "power of dissolution," as in the case of France, to be an evil, as it is one of the conflicting elements of a "divided sovereignty." It may indeed be abused, as any other power may be ; but whether it be an evil or not, it is valued as a conservative safeguard in England, and is occasionally exercised, though not as often in later times, as a change in the Ministry is resorted to. But be all this as it may, a dissolution of the House of Commons never convulses England as the late dissolution of the Chamber of Deputies shook France. The former occasions no greater excitement than does a presidential election in the United States, while the latter, as seen but a twelvemonth ago, threatened to precipitate a revolution. "Dissolution," therefore, goes not one whit toward solving the riddle. Why, forsooth, should this prerogative inevitably be either a red-hot iron or a drawn sword in the hand of the Marshal-President of France, and at the same moment prove a harmless wand when wielded

by the Queen of England? Ah! it is something behind the Marshal-President which shakes the ground all over the French nation when he pronounces the word. The second thing which reveals the insufficiency of this theory of "dissolution" is, most plainly, that no danger was apprehended from it so long as M. Thiers was in power. In fact, no one dreamed that he would exercise it, or that there would be the least occasion for its exercise. Just so long as he continued President, the mass of the nation, except the plotters, were satisfied; the country was regaining its wonted prosperity, the German war indemnity had been paid, and France, so lately prostrate at the feet of Germany, was rapidly rising to her former dignity and power.

It is surprising that so close an observer as Professor Smith should scarcely name, when attempting to account for "the ninety years' agony of France," a cause which, possibly, more than any other single one, lies at the bottom of this perpetual agony. There are, in truth, many causes which enter into the solution, but that now referred to, in its special relation to the others, is believed to be among the chief of those which have continually disturbed and even now threaten the tranquillity of the French nation.

#### THE REAL CAUSES OF THE TROUBLES OF FRANCE.

All of the causes which concern the question in hand deserve mature thought. It cannot be expected, however, that full justice can be done, within the limits of a review article, to a subject so deeply philosophical, and which demands such an extended examination of the subtle agencies which conspire to develop national characteristics. A few hints only can be offered within the space allotted to this paper.

That omnivorous reader and industrious collector of facts, Mr. Henry Thomas Buckle, in the introduction to his work on the "History of Civilization in England," postulates the physical agencies of external nature as among the most powerful causes—almost, indeed, the sole causes—which combine to form the character of nations. Mr. Buckle's generalizations are founded upon a wide induction of particulars, running through most of the civilizations of past times, and, within certain limits, possess a positive value; but he pushes his theories respecting

the power of external nature over man to an unwarranted extreme, ignoring the force of certain moral influences, the direct result of positive institutions, which are adapted and designed to shape the life of the people of all nations, without regard to the zone of the earth which they inhabit or the physical agencies by which they are surrounded. Had Mr. Buckle lived to complete the elaborate work he marked out for himself, some of his views might possibly have been modified by further research, or on more mature reflection. This, however, is not the place to canvass his speculations. They are referred to now merely for the purpose of indicating, from a close analogy with a certain element of truth in them, what may be regarded as one cause of the prominent characteristics of the French people ; and this may furnish a little aid in the solution of the problem of the remarkable history of that people for a century past.

If there be even a modicum of truth in Mr. Buckle's positions—and much more than this is granted—then may it not be fairly assumed, that if our researches in human physiology were as extensive and accurate as is our knowledge of the more palpable phenomena of the external world which have so great an influence in developing national characteristics, and if our physiological researches were pursued with the same end in view which Mr. Buckle has had before him in determining the influence of " food, climate," etc., upon man, might we not find something in French blood which would at least partially explain the marvellous phenomena of French history and the present characteristics of the French people ?

Such a hint, however, cannot be pursued. It is merely thrown out for consideration. Some writers have made much of this in shaping the character and course of nations ; and the deduction here involved may hold a close relation to, and may even be an incidental resultant of, the principles elaborated by Mr. Buckle.

If this theory may be deemed worthy of acceptance, it may be applied with peculiar force to France. Is there a people on the face of the earth so mercurial in temperament, so versatile, so volatile, so elastic ; possessing traits so opposite, so irreconcilably contradictory and repugnant ; so willing to pass through the terrific fires of blood and carnage which their incessant *émeutes* and revolutions have exhibited, and at the same moment make

a jest of them ; so ready to mourn and to dance at the same instant ; so apt at mingling the grave and the gay, upon occasions fitting and unfitting ; exhibiting in their social life a blandness and politeness of manner which becomes a model for the nations, and under it cherishing principles of social immorality, and practising without concealment vices which shock mankind ; mingling, in public affairs, Socialism, Communism, Republicanism, Imperialism, Clericalism, and all possible forms of political organization and action ; chaining the world to their car of fashion, and ruling it with a rod of iron ; presenting before all nations, in their gay capital, in the Exposition of the World's Industry and the Arts of Peace, a spectacle which cannot be equalled by any nation in Europe, and at the same moment nursing a military spirit and developing a military power which may soon astound the world by the clash of arms ?

M. Edmond About, as quoted at the opening of this article, in painting the effect of French "centralization," gives a picture of the French people which may be hung up in any national gallery of Europe, and if a search for a parallel were made, it would be a search made in vain. The "accident" which he so graphically pictures would, "ninety times out of a hundred," have killed any other man ; but it "has only taken, God knows why, a small piece out of a Frenchman's breeches."

The recent work of Victor Hugo, "The History of a Crime : the Testimony of an Eyewitness," gives a view of the people of Paris during the four days embracing the *coup d'état* of Louis Napoleon, in December, 1851, which fully sustains the point in hand. The tragic and the comic, the sublime and the ridiculous, the heroic and the cowardly, scenes of blood and slaughter, freely joined with scenes of festivity—all these drawn by the masterly hand of Victor Hugo, scenes in which he mingled and in which he was a prominent actor, present a picture of French real life which could not easily be paralleled anywhere else among men, and which may perhaps be properly charged to certain peculiarities of French blood.

As another illustration of some of the peculiarities of French character alluded to, nothing can be better, of its kind, than the account given by the late American Minister to France of what he witnessed in the Corps Legislatif, at its first sitting, immediately following some of the early battles and decisive

defeats of the French armies in the late Franco-Prussian war. This illustration is all the more valuable in that it is taken from an official document, furnished in the correspondence of the Hon. Elihu B. Washburne with the American Secretary of State, and recently published by the United States Senate, in answer to a call for the correspondence made upon the President.

Mr. Washburne's despatch is dated at Paris, August 12th, 1870. After stating that "this session of the Corps Legislatif was one of the most extraordinary which has been held since the Revolution of 1848, if not since the first Revolution," and after mentioning by name the several divisions of the body and describing their characteristics, he proceeds to say :

" The President having declared the session opened, he had only read the formal part of the proclamation convening the legislative bodies, reciting, ' By the Grace of God and the national will, Emperor of the French,' when many members of the Left broke out in furious exclamations, saying they did not want any more of that, and it was some time before the President could finish reading the document. After he had concluded he awarded the floor to Emile Ollivier, Minister of Justice, who mounted the tribune and commenced developing the reasons why the Chamber was called together. He had only said a few words when he was met with the most boisterous and insulting interruptions. A member of the Left having cried out that the country had been compromised, Jules Favre exclaimed, ' Yes ; by the imbecility of its chief ! Come down from the tribune ! It is a shame ! ' . . . He then proposed a decree, providing for an Executive Committee of Fifteen Deputies, who should be invested with the full powers of government to repel foreign invasion. This proposition was received with yells of denunciation by the Right, who denounced it as revolutionary and unconstitutional, and the President so decided. After M. Jules Favre had concluded, Granier de Cassagnac, a member of the Extreme Right, rushed to the tribune, and his first words were to denounce the proposition of Favre as the commencement of revolution. He proceeded in a strain of bitter denunciation, amid the shouts, vociferations, and gestures of almost the entire Left. He accused them of hiding behind their privileges to destroy the Government of the Emperor, who was in the face of the enemy. Here came interruptions, calls to order, and threats. Thirty members of the Left were on their feet, yelling at Cassagnac and shaking their fists toward him, and he answered by shaking his fist at them ; and all of this time the members of the Right were applauding Cassagnac, who finally wound up with the terrible threat that if he were a Minister he would send the members of the Left to a military tribunal before night. This was followed by one of the most terrific explosions ever witnessed in a legislative body. All the deputies of the Left jumped to their feet, and raised their voices in most indignant protest. And then rose up the deputies of the Right to drown the cries of the Left with their own vociferations.

Jules Simon descended into the arena in front of the tribune, gesticulating with vehemence, saying if they dared to send them to a Council of War they were ready to go ; that if they wanted to shoot them they would find them ready. This added to the tumult. Nearly all the members were on their feet. The voice of Simon was heard above the din, ' If you want violence you shall have it.' At this moment Estancelin, under great excitement, cried out, ' The Minister of Foreign Affairs laughs.' Jules Ferry was heard in the uproar to say that it was not proper ' for a Minister who was attempting to negotiate a peace to ———,' and here his voice was lost in the tumult. Nearly the entire Left then started from their places and rushed to the area in front of the tribune, and up to the seats of the Ministers ; Estancelin, Ferry, and old Garnier Pages in front. They shook their fists directly in the face of the Minister of Foreign Affairs, the Duc de Gramont, who sat fixed, without moving a muscle. Here the tumult reached its height. A hundred men were screaming at the top of their voices, and the President rang his bell furiously, but all to no effect. And then, as a signal that he had lost all control of the assembly, and, as a flag of distress, he covered himself by putting on his hat. The *huissiers* then rushed in and separated the contending parties, and, some minutes after, comparative quiet was restored."

Can it be supposed that any thing similar to this could occur in the British Parliament ? Would the announcement, made in the House of Commons, that a French army had landed in England, threatening the capital, have stirred up that body to exhibit such scenes of folly ? Could any thing similar to it be witnessed, under like circumstances, in the Reichstag at Berlin, or in the Reichsrath at Vienna ?

Passing the question of the peculiarities of French blood to account for the peculiarities of French character and history—whether the theory be worth much, little, or nothing—another phase of French life which unquestionably has had and now has much to do with the political trials of that people is this : While the several compact dynasties mentioned are still watching to clutch the sceptre, and while the adherents of monarchy have always been persistent, the power of the republican principle has been longer in action and more deeply seated in the French mind than among the people of any other great nation in Europe.

These forces being in constant operation, side by side, are always ready for an explosion ; and that explosion is just as inevitable when certain elements are brought into contact, as an explosion will follow the contact of fire and gunpowder.

The French Revolution of 1789-93 was the uprising of a nation to deliver itself from insupportable oppression. Its aim was good, while some of its measures were unjustifiable and its atrocities diabolical. The causes which produced it had long been in operation.

From that early day to the present moment, the principles of Republicanism and Monarchy have ever been at open strife in France. The people have ever cherished their early love of liberty, while dynastic opposition has ever struggled to recover what it lost in the first open battle with the democratic spirit a century ago. At one moment Republicanism has triumphed, at another time Monarchy, as the numerous and almost incessant revolutions heretofore enumerated have succeeded each other.

Here, then, is one plain and palpable element of the case, which, in a slight degree, serves to solve the question of the "ninety years' agony of France;"<sup>1</sup> and this peculiar aspect of things is found nowhere else in European history during this period.

Considered, then, purely as a political question, and as one of the prime causes of perpetual contention in France, these antagonistic forces stand thus: On one side are the several dynasties, each founding its claim upon divine right and hered-

<sup>1</sup> In reference to the contest between Republicanism and the dynasties of Imperialism and Monarchy, Professor Smith remarks: "We do not greatly fear Bonapartism, in itself, simply as a movement in favor of the restoration of a military despotism for the benefit of a discredited dynasty. What we fear is the implacable hostility of aristocracy to a Republic based upon equality." That touches a vital point. He continues, with great pertinency, referring to the three dynasties: "One and all they instinctively hate equality, and those hate it most bitterly whose nobility is of yesterday. You may demonstrate as clearly as you please that aristocracy has had its hour, that humanity is passing into another phase, that the best and most glorious part which a man who inherits the influence of aristocracy can play is to smooth the transition into a new era: some of the finer minds, and of those who can hope to maintain their position by their own character and intellect, will perhaps listen to you; but the mass will obey the bias of class, cling to privilege, and constantly conspire against equality and any institutions by which equality is upheld. Their feelings toward the democratic masses are not those of mere political difference, but of hatred more bitter than that which is felt by a foreign enemy, and aggravated by contempt. The aristocratic conspiracy, for such at bottom it was, of De Broglie and Fortou has for the moment failed; but the attempt will be perpetually renewed; and it will be fortunate indeed if the question between the Republic and the aristocracy is finally decided without adding another convulsion to the ninety years' agony of France."

itary prescription ; regarding it as their highest duty to assert and defend it, whatever may be the will of the people ; and on the other side are the opponents of all dynastic pretensions, however venerable for age or on whatever basis founded, holding the sentiment that in government the will of the people is the will of God. Each of these two antagonistic forces is persistent, and each is determined. These elements, in such a nation as France, must ever be in collision until the party of the people shall completely triumph over the party which opposes them—a result which is ultimately certain, and whose realization belongs, it is confidently believed, to the near future.

#### THE MOST POTENT CAUSE OF ALL.

And now comes into view an entirely distinct and special element of power, which, acting in close conjunction with Monarchy and Imperialism, has done more than any one single force to keep France at perpetual strife with herself ever since the upheaval of society in 1789, and which to-day is at the bottom of the perils which yet threaten that unhappy people. This is a “spiritual power” (so called), resting its claims, like the political, upon divine right, but assuming a superiority of rule over all peoples, all governments, all kings and princes ; putting the church above the state, and making the head of its hierarchy the special depositary of divine authority, investing him with divine prerogatives and clothing him with the panoply of absolute infallibility.

This spiritual despotism, which has played so prominent a part in French history within the last hundred years—to go no farther back ; which has been directly concerned in every change of government which France has experienced ; which instigated and stimulated the French President and Senate in their unattained purposes of the last twelvemonth ; which is still watching its opportunity when the crisis of 1880 shall arrive, and which, taken alone, is here regarded as the chief cause, on one side, of “the ninety years’ agony of France,”—is the factor in those troubles which is substantially overlooked by Professor Goldwin Smith in his elaborate and valuable paper upon this unparalleled chapter of history.<sup>1</sup>

<sup>1</sup> Professor Smith, near the close of his article, does make the following incidental allusion to the cause here referred to, plainly showing, from the manner of his reference, that he deems it of trivial importance : “ We do not greatly fear the

Ultramontanism and Republicanism are natural enemies, while Ultramontanism and Monarchy are as naturally, in principle at least, fast friends. The three dynasties now existing in France favor Ultramontanism because it opposes the rule of the people ; and Ultramontanism favors Monarchy or Imperialism for the same reason. One embodies despotism in the state, the other embodies despotism over both church and state. They mutually aid each other in the common purpose of opposing the will of the people in order to gain their own ends, while all lovers of liberty among the people must array themselves against both éléments of this double despotism.

The operation of these two conflicting forces furnishes the true key to the door which opens upon the French Revolution of 1789-93, and it largely explains the revolutions which have followed it.

The initial causes which resulted in the upheaval of the political, social, and ecclesiastical fabric in France nearly one hundred years ago have substantially perpetuated themselves, and are at the bottom of the troubles of France to-day. That is to say, now as then, on the one side is Absolutism in the State, then, however, embodied in a single dynasty, but now, all the worse, embodied in three, determined, at all hazards, to rule France, and seeking alliance with every power in heaven and earth and under the earth, to gain its ends ; and alongside of this Secular Absolutism, part and parcel thereof, acting apparently in its behalf, but really using it as an instrument while acting for its own ultimate ends, stands a more fearful Spiritual Absolutism ; its official representatives and their adherents making ninety-four per centum of the whole population of the nation ; having access to the most sacred precincts of every household and claiming to rule every conscience ; solemnizing every marriage and officiating at every baptism and every burial ; insisting upon the right from God to make and dethrone princes, and to rule over all governments and people on the broad earth ; acknowledging allegiance to him alone who sits upon his throne in the seven-hilled city, clothed with divine prerogatives, infalli-

clericals since the catastrophe of Eugénie and her priests, and when Ultramontanism, in spite of its recent spasm of aggressive energy, is manifestly losing ground throughout educated Europe."

ble in wisdom and power, exalting himself "above all that is called God or that is worshipped, so that he as God sitteth in the temple of God, showing himself that he is God."

Who that looks upon this true but faintly-drawn picture does not see that its place in the national gallery is even more appropriate in 1878 than it was in 1789? The morals of French society to-day, in the circles which surround those in power and in the higher posts of the church, may, perhaps, be better than they were one hundred years ago;<sup>1</sup> but these are the mere incidents of the case. The main characteristics in all things that make up the essence of the situation are the same: Absolutism in the state linked with Absolutism in the church; the two, leagued in one, against the cause of the people, with the people knowing their rights and determined to assert them.

The essential feature of the situation which writers of the class of Professor Smith overlook, or greatly underweigh, is the very palpable fact, seen through every period of the ninety years' agony of France, and seen now, that any one of the dynasties mentioned, representing Monarchy or Imperialism, or all of the three combined, would be utterly impotent in their contest with Republicanism, the synonym of "hated equality," were it not for the Ultramontane element, the essence of the Spiritual Absolutism. Without its aid they are powerless. Incurring its hostility they would perish. As mere political forces, they are nothing in France to-day, whatever their prestige or however compact their organization, for the obvious reason, that, without the support of the priesthood, they cannot reach and control the people. But whenever able to draw to their aid that power which the hierarchy wield, they have hope. Should the priesthood change front, and throw their influence into the scale of Republicanism, instructing, as is their wont, the members of their flocks to vote for it, Imperialism and Monarchy would have no more hope in France than they have in the United States. They would instantly perish.

<sup>1</sup> And yet Pius IX. did not hesitate to bestow, quite recently, the "Golden Rose" upon ex-Queen Isabella, in "honor of her devotion to the Papacy"—a "royal lady" whose personal morals and those of her court were so openly and shamelessly dissolute, that the people of Madrid, where morality among princes and nobles has never been noted for its rigidity, could no longer tolerate her presence, but drove her from her throne and from the Spanish dominions.

Jonah's gourd would be too permanent a symbol of their life. This, of course, no one expects, under any emergency. Ultramontanism too well knows that established Republicanism would be its own death, while under Imperialism or Monarchy it has a little hope left ; hence it stands firmly by the dynasties.

But it should never be forgotten—and here is the vital essence of the whole case—that Ultramontanism acts for itself, first, last, and always ; that, in themselves considered, it cares not one whit what becomes of Imperialism or Monarchy, or any of the pretended emperors or kings who represent them. If it can use them for its own purposes, it will do so ; if it cannot, it will be indifferent to their fate. They may think they are using it, and so they are ; but the reverse is the more important fact. It uses them just as it essays to use every thing and everybody—simply and solely for its own purposes ; and centuries of history attest its wonderful success. Like the atmosphere, it is not seen, but everywhere felt. There is no effective social and political power known among men which is so nearly ubiquitous as the spirit of Jesuitism, the spirit which animates the whole body of the Roman Catholic Church, from him who is its head, claiming infallibility, down to the lowest order of the priesthood who occupy the confessional in every corner of the world.

These are the well-known conditions of this power which sustain and illustrate the proposition, heretofore announced, that Ultramontanism is, beyond all comparison, the one solitary force, if taken singly, which underlies the perils and dangers which now, as always before, beset France. The very nature of Romanism makes it so. The cardinal principle of the system is, that it is from God and cannot change.

If, now, the question be asked, why this Spiritual Absolutism, in the midst of so many European nations which are in popular and often in diplomatic parlance called "The Catholic Powers," has so long been and is now more disastrously demonstrative in France than anywhere else in Europe, the answer is by no means difficult. It is found in the grouping of the facts already noticed. France, beyond any of the Great Powers, and also beyond most of the smaller, is more compact and homogeneous in race, language, and religion ;<sup>1</sup> fewer of her

<sup>1</sup> The best authorities give the ratio between the Roman Catholics and the whole population of the leading States of Europe, respectively, as follows : In

people emigrate, in proportion to population, and none are so attached to the soil and cherish with more pride her glory and renown ; no nation, owing to location and peculiar circumstances, was so early brought into contact with democratic principles, while among no people was loyalty to the crown more intense, and while, again, owing to the revolutions which these conflicting principles engendered, no other nation brought to the surface and perpetuated so many rival dynasties ; and, finally, in no other European nation has the Roman Catholic Church, the embodiment of Spiritual Absolutism, holding sway over so large a per cent of the population, been represented by a hierarchy so intelligent, so enterprising, and so powerful, flattering and using those in authority as well as those behind the throne purely for its own ends, and directed in all this by the Sovereign Pontiff at Rome, he in turn stimulated by the Society of Jesus, whose influence is well-nigh omnipresent, and whose domination over pope, priests, and people is but little less than omnipotent.

No nation of Europe has been so subservient to the papal power, and no nation has served it so faithfully. When the advancing spirit of liberty in Italy, resulting from the general upheaval of 1848, drove Pius IX. from his throne, French soldiers restored him to it. While the same spirit, prompted by Garibaldi, still threatened, French soldiers stood guard around the Vatican. The pope flattered Napoleon III. as the eldest and most devoted son of the church, and the emperor, in turn, defended the papacy. Their interests were mutual. The emperor was rewarded for his service to the pope in the greater loyalty to the emperor diffused among the French people through the influence of the priesthood ; and the pope, in turn, found his reward in the protection furnished him by French bayonets. This mutual support continued down to the opening of the Franco-German war, and perhaps might have continued still but for that event. Not until the French soldiers had been withdrawn from Rome, to be used against Germany,

France, ninety-four per centum ; Italy, eighty-two ; Austria, seventy-six ; Great Britain, nineteen ; Germany, fourteen ; Russia, nine. The foregoing estimate is based upon the following totals of population, given in round numbers : France, 38,000,000 ; Italy, 26,700,000 ; Austria, 36,000,000 ; Great Britain, 31,800,000 ; Germany, 41,000,000 ; Russia, 75,000,000.

did the legions of Victor Emmanuel enter the Eternal City. But where, at that critical moment, were all the other "Catholic Powers"? Why did not Austria or Spain, or smaller states in sympathy with the papacy, strike even one blow for the church in whose interests, during the ages, their loyalty had been so signally illustrated? Why did they not all combine for this? Catholic France and Protestant Prussia were the only powers at war. The rest of Catholic Europe stood still and saw Pius IX. despoiled of his temporalities, deprived of his throne, the gates of Rome battered down by the armies of Sardinia, at that time scarcely a third-rate power in European politics, and the pope made a prisoner in his own palace.

Could any thing more palpably illustrate the fact that, among all the nations, France was really the only strong Catholic power in Europe? Could any thing more forcibly show the hold which the priesthood had upon the French nation? And so it is at this moment. While Spain and Austria, singly or combined, are impotent to aid the papacy, and while it is conceded that France is equally so, under republican rule, still it is to France alone that Ultramontanism looks for restoring to the papacy its rights and giving back to the church her ancient and God-given sway over the world. This it is which renders compact the clerical party among that homogeneous people. This it is which inspires the priesthood to oppose, to the death, republican rule. This it is which binds the hierarchy to favor the Comte de Chambord, or the Prince Imperial, or the Comte de Paris—they care not a farthing which—so that, through restored Monarchy or Imperialism as a means, this Spiritual Absolutism may gain its ultimate end. And these are the considerations, ramified and multiplied, which combine to show that, of all other causes, that which deeply underlies the present perils of France, and that which has been her standing trouble during her "ninety years' agony," is the spirit and determination of the Ultramontane party to regain, at every cost, their ancient prestige and power.

#### SO MUCH FOR THE PAST—WHAT OF THE FUTURE?

What, then, is to be the upshot of this still pending issue? What at this moment is the political outlook in France?

Which of these two opposing forces, Absolutism or Republicanism, is ultimately to triumph?

It is to prepare the way for an answer to these vital questions that an extended examination of the difficulties in the path has here been attempted. The spirit now working in Europe, the spread of the principle of constitutional government, the greater diffusion of intelligence, the advancement in education, the concessions made to the representatives of the people in many things heretofore regarded as the prerogatives of kings, the opening up of the means of a more free and rapid intercommunication between the people of the same nation and between those of one nation with another, together with the progress rapidly made in all the arts and sciences, combine to show that the reign of Absolutism, whether in church or state, is nearing its end, and that the rule of the People is fast approaching.

A most remarkable and significant fact, and without a parallel in the history of France—significant in its bearings in a political, social, and especially in a religious point of view—is seen in the present composition of President MacMahon's Cabinet. The men who compose it were selected in obedience to the demand of the Chamber of Deputies, as reflecting the sentiment of the people at large, and resulting from the long and severe struggle of the various parties to secure predominance in the Cabinet, after the election for the present Chamber held in October last. M. Gambetta, in his electioneering addresses, proved a true prophet in declaring that, if the Republicans should triumph when France had spoken at the ballot-box, the President would have "to submit or resign." He would not resign, but hoped to defeat the will of the people in the composition of his Cabinet. It is within the recollection of all who closely watched events, that the President made several unsuccessful attempts to obtain a Cabinet, owing to the opposition manifested in the Chamber. He finally chose "to submit," and therefore selected the present incumbents, with whom the Chamber of Deputies were satisfied. The number in the Cabinet is nine; and the significant fact is that five of them are Protestants. It is not supposed that they were chosen because of their well-known religious sentiments; but it is, nevertheless, a rather remarkable event in French history, and shows, unmis-

takably, the drift of public sentiment. The Catholic hierarchy were, of course, aroused, indignant, disgusted ; but can any thing more plainly show that they are impotent before the will of the people ? The positions, also, which this Protestant majority in the French Cabinet hold are noteworthy. M. Waddington is Minister of Foreign Affairs ; General Borel is Minister of War ; Admiral Pothuau is Minister of the Marine ; M. Léon Say is Minister of the Finances ; and M. De Freycinet is Minister of Public Works.

The principles of liberty and constitutional government are firmly rooted in Western and Central Europe, and they are spreading in all directions. Austria and Russia are feeling their force, the Ottoman Empire is crumbling before them, and their march is triumphantly onward. It is a progress which no human power can stop. What has already been accomplished among some of the leading Continental Powers, in adopting constitutional government, is quite a recent work. It is but twenty-eight years since Prussia, the leading state of United Germany, adopted a Constitution ; while Austria took the first step in this direction a little more than ten years ago. Under the liberal spirit and policy of the Emperor Alexander, Russia, the last of the European Powers to maintain Absolutism, will soon follow suit, and the power of the People will thenceforth be everywhere recognized.

It is scarcely to be believed that the opposite forces, already weakened and trembling, can long hold even their present sway in France. Spiritual Absolutism need not, however, be expected to make concessions. To do this is to disembowel itself. It will stand in its tracks and perish in the ditch. This is history ; this is prophecy ; and prophecy will again become history. It is but a question of time, possibly of months, possibly of years ; and it may be that it was settled for France last October ; or, if not, that it will be decided and forever settled when President MacMahon's term shall expire—two years hence. But its final settlement is undoubtedly near at hand. When it shall come it will be against Absolutism in both church and state, and in favor of the People. May God speed the day !

ROBERT L. STANTON.

## THE COST OF A LANDED GENTRY.

**I**N 1869 the British Government obtained and published an elaborate report upon the tenure of land in the United States. We were informed that "the system of land occupation in the United States of America may be generally described as by small proprietors;" that "the proprietary class throughout the country is on the increase;" that "the theory and practice of the country is for every man to own land as soon as possible;" that "the American people are very averse to being tenants;" that "land is so cheap in the sparsely peopled portions of the country that every provident man may own land in fee;" that "the possession of land of itself does not bestow on a man, as it does in Europe, a title to consideration;" that "absolute titles to land are easily and quickly acquired;" and that while in the United States the landowner "has entire freedom to devise his property at will, in the event of his dying intestate his real estate is equally divided among his children, without distinction as to sex, subject, however, to a right of dower to his widow should there be one." We further learned that tenancy of agricultural land was not only rare, but was also much restricted; that, for example, in the State of California, "no lease of agricultural land can be for a longer term than ten years;" that, by the constitution of the State of New York, adopted in 1846, it is declared that "no lease or grant of agricultural land for a longer period than twelve years, in which shall be reserved any rent or service of any kind, shall be valid;" that Michigan in 1850 adopted the same term; that in many States, in regard to rent, "the law confers no privileges upon the landlord above other creditors;" that in the United States "the sale and transfer of

land are conducted with about the same ease as would be the sale of a watch," and that "very large quantities of land are seldom held undivided by one family for more than one or two generations"—a fact of which an illustration was given "in the case of the Livingston family, whose noble domain in the State of New York, embracing upwards of 160,000 acres, and which was granted to them under patent of the Crown, by the colonial governor, was divided in 1790 by the third and last landlord of the manor, he being imbued by the progress of advancing ideas and the changing character of American institutions."<sup>1</sup>

The phrase with which "his Majesty's representative" concluded the above quotation is not well composed, but it may be taken to indicate that which I believe to be truth: that the institutions of the United States and the feeling of the American people are opposed to the establishment of a landed gentry. We may not say that never in the future history of the United States will there be a landed gentry possessing a great part of the agricultural land, and, together with it, large power and influence, but we may certainly affirm that such an institution cannot be indigenous as in England. We can fancy a time, and that not very remote, in which the Homestead Law of 1862 may be placed among the curiosities of American legislation, when there will be no "unappropriated territory of the United States" on which new settlers can be placed, when the current rate of interest on capital will have declined to an equality with that which is general in England, when all the present conditions of landowning will be changed, when the ambition of many of the wealthiest citizens of the United States will tend towards the acquirement of land. But economic considerations we may be quite sure will never in the United States be put out of sight as they have been in England in deference to the landed gentry, because of the radical difference in the foundation of the two communities. The English nation was founded at a time when the idea upon which what we call the origin of society is based—the rule of the family—governed the world; that idea has survived in England. The American community has been

<sup>1</sup> Part I. Reports from H. M. Representatives respecting the Tenure of Land in the several Countries of Europe (*sic*), 1869.

formed upon quite a different model. Among all the great contributories to the formation of the English people, the elementary group was the Family. The Family, House, and Tribe of the Romans may be taken as the type. Sir Henry Maine's researches in "Ancient Law" may well be referred to upon this point. He says: "The aggregation of Families forms the Gens or House. The aggregation of Houses makes the Tribe. The aggregation of Tribes constitutes the Commonwealth. . . . The history of political ideas begins in fact with the assumption that kinship in blood is the sole possible ground of community in political functions; nor is there any of those subversions of feeling which we term emphatically revolutions so startling and so complete as the change which is accomplished when some other principle—such as that, for instance, of *local contiguity*—establishes itself for the first time as the basis of common political action."

I wish, in the first place, to maintain that English society was founded and is still vastly influenced, if not altogether ruled, by the ancient idea; and that the United States differ essentially in that they were founded and are altogether governed upon the modern idea of a community. To make this more clear, we cannot do better than follow a little further the lucid argument of Sir Henry Maine. "The idea that a number of persons should exercise political rights in common simply because they happened to live within the same topographical limits was utterly strange and monstrous to primitive antiquity." "They recruited themselves by factitious extensions of consanguinity." They became Aristocracies when "a fresh population from any cause collected around them which could put in no claim to community of origin." Perhaps one of the closest survivals of the *Patria Potestas* of the Romans which endures in our time is the Royal Family of England, with of course the signal difference of feminine headship. With the Romans the maxim "*Mulier est finis familie*"—a woman is the terminus of the family—prevailed, and so it does in this day among the British landed gentry. The history of civilization is distinguished by the gradual dissolution of family dependency and the growth in its place of individual obligation. As Sir Henry Maine puts it,

“ The Individual is steadily substituted for the Family as the unit of which civil laws take account.” Admitting that society in the United States was based and is formed upon the Individual as the unit, I shall contend that there is a substantial difference yet discernible in English society, and that this is largely due to the survival of the ancient idea as represented, with much cost to the people, by the landed gentry.

In feudal times primogeniture became the concentrated form of authority in which the family appeared, and the practice is adhered to in Great Britain with marvellous fidelity. In the new Domesday Books, published at the instance of the fifteenth Earl of Derby by the Government of which till lately he was a distinguished member, we find 525 nobles, composing, with a few exceptions, the Upper Chamber of the Legislature, and all of them adhering in their families to the practices of feudalism—returned as owners of one fifth of the area of the United Kingdom. They have each, on an average, three landed estates. The number in the several grades of nobility, the number, acreage, and annual value of their estates, are set out in the following table :

	Separate Landed Estates.	Acres.	Estimated Rental.
Dukes.....	28	153	£2,357,655
Marquises.....	33	121	1,383,671
Earls.....	194	634	5,007,119
Viscounts.....	52	120	644,771
Barons.....	218	560	3,135,852
	525	1,593	£12,529,068

Below the nobles in rank, but superior in number and hardly inferior in possessions and local influence, are the lesser landed gentry, who, together with the nobility, are owners of about four fifths of the soil of the United Kingdom. Owing to manifold errors in the official compilation, it is not very easy to form a precise estimate of their number. But these new Domesday Books afford at least a good basis for calculation, and from those books I have compiled the following figures, which show the

number of owners of "1000 acres and upwards" in the three divisions of the United Kingdom :

	Owners of 1000 Acres and upwards.	Total Extent in Acres.
England and Wales.....	5,408	18,695,528
Scotland.....	1,758	17,584,828
Ireland.....	3,745	15,802,739
	10,911	52,083,095

The area of the United Kingdom, as given in these books, exclusive of the metropolis, is 72,117,766 acres, of which four fifths would not greatly exceed the aggregate possessions of 10,911 owners. But having fair regard to omissions and overstatements admitted by the compilers of these official reports, there is no doubt that the owners of four fifths of the soil must be much fewer than 10,000.

These are the landed gentry, and I take their number at about 7000. They are in possession of four fifths of the United Kingdom (more than 52,000,000 acres). They are in possession as representatives of families, not as individuals; and these families inherit and observe feudal practices, just as Sir Henry Maine says, "The early feudal confederacies were descended from an archaic form of the family."<sup>1</sup> With reference to economic considerations it is unfortunate and injurious that the landed gentry of the United Kingdom are, with very few exceptions, not owners of the lands with which their names and titles are connected. It is, I think, a national evil of the gravest character, that the men who are in possession as landlords of four fifths of the soil are not and can never become responsible, interested owners of the fee-simple or freehold of their lands. Take the case of the hereditary leader of the Peerage, the Duke of Norfolk, an exemplary nobleman and a good landlord. His Grace is not owner of the ancient family seat, Arundel Castle. There is no owner of the Norfolk estates. The duke, after the manner of the landed gentry, has signed away his inheritance and is but a life-tenant; the superior title to the vast domains of the family awaits an unborn son of himself or of a brother. I have

<sup>1</sup> "Ancient Law," p. 237.

no doubt whatever that Lord Derby had far greater happiness in the business of the Foreign Office than in the concerns of his family estates. Why should it not be so? In Downing Street he was responsible manager; at Knowsley Park his legal title is inferior to that which may belong to the infant son of his brother, who is now Secretary of State for War. Lord Derby has in the usual way forfeited all possibility of being proprietor, and the ownership of estates which are probably approaching a value of £200,000 a year, failing issue of his own, is devolved by settlement upon the eldest male child of his brother, who, if he were to refuse to re-settle the property when he arrives at manhood, may be freeholder of the Knowsley estate—a position which his distinguished uncle has, in accordance with the unwritten feudalistic code of the English landed gentry, abandoned for himself.

The family affairs of the landed gentry are all regulated upon a uniform pattern. Any owner of land can by settlement (or will; but, true to the idea of the family, British land is generally dealt with by settlement in view of marriage) determine the inheritance for the lifetime of any number of persons in existence, and for twenty-one years after the death of the latest survivor of these persons. This has been the nearest limit which the "Family" Parliament of the United Kingdom would consent to. In this way land may be, and for the most part is, "settled" for a century. Let us suppose the case of a "new man," who, having purchased a fine estate, desires, as the phrase goes, to "found a family." He has, we will assume, a son, a minor. He has brothers, to whom, if he die childless, he wishes the family foundation to belong. He instructs the family solicitor to make his will, by which he conveys the landed property to certain friends, trustees, for the benefit of his son, and, should his son's life fail, then to his brother; and should his brother's life fail, then in succession to the male children of his brother. If his brother die without issue, then to his next brother, and that life failing, then to the unborn son of that brother; and so on through all the members and heirs of the elder generation until not the poorest scrivener, paid by the word, could suggest a fear that the estate might fall out of the line of entail. These claims are thus "tailed on" one after another,

the first "estate tail" being obviously that of the son. But so far the "new man" has only made a will which he can revoke or destroy. He has done no injury to public or economic interests. His land is still "free;" if he is insolvent, it can be sold; it is his, he can deal with it as he pleases for his own benefit, for the advantage of his tenants and his posterity. He proceeds to deprive his land of this vendible character, which is the best and the due security for the public interest in the soil, to make it, in aristocratic fashion, "no-man's land," when his son reaches manhood and is perhaps about to marry. Then the business of founding the family is consolidated and secured. The "new man" now parts with his acres; they are made over at once to trustees; he abdicates the position of a freeholder; he accepts from their hands that of a life-tenant; he has bargained with his son that he (the son) shall be his successor in the life-tenancy, and that they both together shall agree to place next in the tail of possessors the son who may be born of the approaching marriage. The family is now founded; the marriage is solemnized, and in due time perhaps the "new man" fondles a grandson, who, in noble manner, is born a landed gentleman. He, the baby, can by no act of his grandfather or of his father be dispossessed of inheritance. He is the heir, and if he survive them both, the estate must be his. After him in the entail follow his expected brothers, his uncles, etc.; so that if he live to manhood, and it is desired to continue the "family" in his line, the entail which was made by his grandfather and father must be cut off, and his prospective son must be placed next to himself in the line of inheritance. But much happens with regard to a British estate when the heir comes of age. With the consent of his grandfather and father, or, if both are dead, by his own free will, he can execute a disentailing deed, and lo! the land is free again, and he is the freeholder. But this is not the practice of the landed gentry. Their delight is to renew with pen and ink the legal fetters. As a rule, the father is alive and is enjoying the prospect of long life when his son comes of age, and it is necessary to guard the estates, according to unfruitful custom, from lapsing into freedom. A new deed of settlement is laid before the heir, and if he refuse to sign, he may, after his father's death, possess himself of the freehold. He invariably

signs, and it may be asked, Why do eldest sons thus part with the fee-simple of their inheritance? The answer is easily made, and seeing the inducements, it certainly is not surprising that an absolute refusal is, we may say, never encountered. The force of custom, especially when that custom is the mark of a powerful and privileged class, is very great. But that is by no means the whole matter. The heir's reversion may not come for thirty years, perhaps more, should his father live to a great age, and he is meanwhile dependent upon his father. The reversion, too, is contingent upon his own existence. How much better is it for him to accept a suitable allowance from his father and to re-settle the property upon the children which he himself may have! His expectancy of entering into possession is remote; the duty to his father, to his family, to the honored customs of the class to which he belongs, is pressing, and so is his youthful appreciation of the handsome income which will be his to spend upon completion of the legal business of that day. In fact, it seems to him that there is no choice; nor indeed is there, practically. How could he otherwise obtain the income he needs for those best years of his life—perhaps thirty or forty—which may elapse before the death of his father? Borrow? Yes, he may borrow upon his contingent reversion; but he will find that borrowing brings but little money to his pockets, and that it quickly deprives him of all interest in his inheritance. Any actuary will show him the matter in plain figures. If the father be aged 45, and the property be worth £10,000 per annum, the value of the reversion of the son at the age of 21, calculated at five per cent, is not more than £15,000. No surprise; then, need be felt concerning the ease with which more than 50,000,000 acres in the United Kingdom are continually re-settled.

This system of settlement, which is the chief security for the present distribution of the soil of the United Kingdom as regards ownership, is of course injurious to the interests of production. That part of the question is many-sided. It is owing to settlement that England is carved out into vast estates, upon which, partly by force of custom, partly from convenience, partly perhaps from indifference and indisposition towards change, but one form of agriculture, that of large farms, is exclusively adopted. To the settled condition of the land also it is owing

that the relations of landlord and tenant contain so many traces of "feudalism," which the Duke of Argyll has defined as "a term of reproach for certain personal and hereditary influences which are disliked and disapproved by those who use it."<sup>1</sup> But it cannot be denied that these influences weigh heavily against public interests, whether they lead the landlord to be unwisely lenient in regard to rent, to the encouragement of slovenly farming, or whether they tend to keep both landlord and tenant too long in the grooves of custom in their agriculture. But settlement is perhaps most obviously hurtful in the more direct repression of improvement and discouragement of outlay of capital on land. Upon this point no authority is better than that of Mr. Caird, who has written: "Much of the land of England, a far greater proportion of it than is generally believed, is in the possession of tenants for life, so heavily burthened with settlement encumbrances that they have not the means of improving the land which they are obliged to hold."<sup>2</sup> Many of the tenants for life of settled estates are upon the verge of insolvency, which implies the restriction of all improvement upon their property, and when some one crosses the border, then, as in the following case, recently before the Bankruptcy Court, the evils of the system upon which four fifths of the soil of England are settled are fully exposed: "A property of 16,000 acres, with a rental of as many pounds, was settled upon Lord — for life, with remainder to his son Lord — as tenant in tail. Upon the coming of age of Lord — the estate was re-settled. In consideration of an annuity of £1500 per annum, the son agreed to join in the settlement, and to assent to charges which brought up the total encumbrance to £11,500 per annum, leaving a margin of £4500, out of which the son was to receive £1500 per annum during the father's lifetime. The son gave up his reversion in tail, and took a life interest in succession to his father, with remainder in tail to his own issue. Within a year from the re-settlement, the son, having run into debt for a few thousands, was made bankrupt; the whole of his reversionary life interest was then assigned to the creditors, and the result is that during

<sup>1</sup> "Commercial Principles applicable to Contracts for the Hire of Land." By the Duke of Argyll.

<sup>2</sup> "British Agriculture." By James Caird, C.B., F.R.S.

the lives of the father and son, and perhaps for many years after, this great estate will be in the ostensible possession of men absolutely without means, and without any motive, or probably power, to sell.”<sup>1</sup>

The excessive devotion of the soil, especially in the north of the kingdom, to the produce of game is also a factor in the cost of a landed gentry. Mr. C. S. Read, M.P. for Norfolk, late Parliamentary Secretary to the Local Government Board, has recently said that “a landlord could now let his farm to a tenant upon the usual covenants and eat him up with game without paying him the usual compensation. He could turn him out of his farm and half ruin him with a six-months’ notice to quit by confiscating every shilling of his improvements.” As to the north, I will give the particulars of the transformation of a sheepwalk producing food and commodities valued at £381,000 a year into deer-forest producing food and commodities extremely valued at £37,620 per annum. The following figures are accepted as accurate by a well-known writer, Dr. D. G. F. Macdonald, in a practical work entitled “Cattle, Sheep, and Deer,” and inscribed with much adulation to the Duke of Sutherland. The estimate is made that in 1871 no fewer than 1,320,000 acres were set apart for deer at an average rental as deer-forest of 13*d.* per acre, which, as pasturage for sheep, would be worth only 10*d.* per acre. The account, therefore, stands thus :

SHEEP *versus* DEER.

1,320,000 acres @ 1/1 .....	£71,500
1,320,000 acres @ /10 .....	55,000
Gain to Proprietors.....	£16,500

This is followed by an account, the items of which do not appear to be in any way disputed by this practical land-agent, showing the interest of the community in the matter. It is presumed that the 1,320,000 acres of land would carry 156,000 cheviot and black-faced sheep, and that in its present condition of deer-forest 8800 stags and hinds are all the possible produce. The contrast is as follows :

<sup>1</sup> “Limitation of Entails and Settlements.” By G. Shaw-Lefevre, M.P.

SHEEP.	DEER.
156,000, 60 lbs. each, @ 8d . . . . £312,000	8,800 stags and hinds,
300,000 fleeces (deducting	140 lbs. each, @ 6/..... £30,800
lambs) @ 2/.....	30,000 8,800 skins @ 3/6..... 1,540
156,000 skins @ 5/.....	39,000 8,800 heads @ 12/..... 5,280
	-----
	£381,000
	-----
	£37,620

In this statement, the annual gain to the landlords appears to be £16,500 and the loss to the community £350,000. But what a trifle is that compared with the loss caused by withholding the soil of England from the application of commercial principles! Forced into the possession of the landed gentry, and retained by uncommercial laws and customs, the result is that they get but a poor rental, and that the value of the annual produce does not much exceed £3 per acre.<sup>1</sup> The conditions of their tenure deny the approach of adequate capital to the soil. When four fifths of the soil are settled, it is obvious that sales of land must be few. For the most part, tenancy is from year to year, and though it is not doubted by competent authorities that the home production of food could be vastly increased by a more enterprising and thorough cultivation of the soil, so accustomed are the British people to accept the supremacy of the landed interest in Parliament, that no general effort is made in a direction of such supreme importance. Probably no member of the nobility has more influence throughout England than Lord Derby. But when his lordship declared in 1871 that "the fact still remains that we do not get as yet, out of English earth, one half of what we probably might with advantage if all our present resources were brought to bear on the soil," people said that Lord Derby's great property in Lancashire grew houses and factories, and that he knew nothing about agriculture. Among practical British farmers, no one has greater weight than Mr. Mechi, and when he said last year that "the capital now invested in agriculture was not much more than £5 10s. or £6 an acre, while for good and satisfactory farming it ought to be double or treble that amount,"<sup>2</sup> none could deny the import or the truth of

<sup>1</sup> Proceedings London Farmers' Club, June, 1862.

<sup>2</sup> *Daily News*, Dec. 14th, 1877.

his remark. Why, then, have the British people not clamored for better agriculture? Cobden thought it "astonishing that the people are so tacit in their submission to the perpetuation of the feudal system in this country as it affects property in land, so long after it has been shattered to pieces in every other country." He declared the cause of this acquiescence to be that "the great increase of our manufacturing system has given such an expansive field of employment to the population, that the want of land as a field for investment and employment for labor has been comparatively little felt." "So long," he predicted, "as this prosperity of our manufactures continues there will be no great outcry against the landed monopoly." I fancy that the time has nearly arrived, and that before very long the outcry will be heard demanding that British land shall be free from these trammels, and that the landed gentry must take their chance of continuing their existence as responsible owners, not as tenants for life, of their estates.

If we turn from the land to the legislature we find painful traces of the cost of the landed gentry. From the origin of Parliament to the present day, landlords have been the ruling power in Britain. In the revolutionary periods of the seventeenth century they lost this supremacy ; but it was instantly regained ; and now, ten years after the adoption of a Reform Bill which enfranchised every householder in large towns, I will venture to say that 800 of the 1150 members of both Houses of Parliament are either members or close connections of the landed gentry. Of course this predominance is traceable in British legislation. The landlords have defeated every attempt to abolish primogeniture, which has been attacked by bills providing for the devolution of real estate in cases of intestacy in the same manner which the law directs in regard to personalty. They have substantially maintained an odious law of transfer which is cumbrous and costly, because it operates as a protection to the large estates. The troubles of the British transfer are comparatively unfelt by the peer who is purchasing 1000 acres to add to his domain, or by the "new man" who is buying 5000 acres upon which to found a family ; for as to cost, the percentage will be but trifling upon the purchase-money, delay will not ruin them, and as to the custody of title-deeds, the family

solicitor is almost a part of their establishment. But small purchasers arrive with terror at a transaction in real estate. The cost of transfer sometimes mounts to a third of the purchase-money, the delay may be of months or extend over a year, and then there are the parchment deeds, which give at best an uncertain title. The mass of the British people shun all such transactions. Our small lawyers adore the system by which they grow fat with ease ; our great lawyers abuse the system until they are translated to a peerage, and then—either because they have learnt that resistance is futile, or because they too must found a family—their old age is marked with acquiescence if not contentment. Never in this or any other age of English history has a great lawyer had so much power for reform as is now possessed by Lord Cairns, the present Lord Chancellor. He toils not for the amendment of the law of transfer, yet it was he who spoke in the following words of one of the most abominable abuses which are still endured by his countrymen : “ You buy an estate,” said Lord Cairns nineteen years ago,<sup>1</sup> “ or you enter into a contract for the purchase of an estate. You are very anxious to get possession of the property you have bought, and the vendor is very anxious to get his money. But do you get possession of the property ? On the contrary, you cannot get the estate, nor can the vendor get his money, until after a lapse—sometimes no inconsiderable portion of a man’s lifetime—spent in the preparation of abstracts, in the comparison of deeds, in searches for incumbrances, in objections made to the title, in answers to those objections, in disputes which arise upon the answers, in endeavors to cure the defects. Not only months but years frequently pass in a history of that kind ; and I should say that it is an uncommon thing in this country for a purchase of any magnitude to be completed—completed by possession and payment of the price—in a period under at all events twelve months. . . . But that is not the greatest evil. . . . I spend a year, or two or three years, in ascertaining whether the title is a good one. I am at last satisfied. . . . About a year afterwards I desire to raise money upon mortgage of this estate. . . . And then,

<sup>1</sup> Speech of Sir H. Cairns on Introduction of Registration of Titles Bill, 1859.

as between me, the owner of the estate, and the lender of the money there is a repetition of the same process ; the same expense is incurred as when I bought it. . . . Well, that is not all. Months or years after all this is completed, I find I must sell my estate. The intending purchaser says, ‘ No doubt you thought this was a good title when you bought this estate, and no doubt this lender of money thought he had a very good security when he lent his money, but you are now asking me to pay my money.’ Then again commence abstracts, examinations, objections, difficulties, correspondence, and delay.”

That is the British system of transfer described by the actual official head of the British law. There has been an excess of cost in the construction of railways in the United Kingdom, compared with railways of the Continent, amounting to not less than £100,000,000, of which the landlords received by far the larger part as payment over and above the extreme value of their lands, the balance being absorbed by unnecessary payments to lawyers and for other professional services which the opposition and vexatious processes of the landlords demanded. However ignorant and shortsighted, this opposition would have been legitimate had it been confined to their private capacity. It was because the landlords sat as judges with a perpetual majority in Parliament that the British railways have been so heavily weighted with excessive expenditure. It was natural enough that peers and squires should believe that fox coverts and game preserves would be injured by railways ; it was to be expected that a brand-new baronet should say to Robert Stephenson, “ Why, Mr. Stephenson, if this sort of thing be permitted to go on, you will in a few years *destroy the noblesse !*”<sup>1</sup> and perhaps it was natural enough that the Lords and Commons determined to make a good thing out of the innovation. In narrating the history of the bill for the construction of the London and Birmingham Railway, Dr. Smiles tells us that “ the promoters found to their dismay many of the lords who were avowed opponents of the measure as landowners, sitting as judges to decide its fate. The bill was thrown out. Thirty-two thousand pounds had been expended in preliminary and parliamentary expenses up to this

<sup>1</sup> Smiles’ Life of Robert Stephenson.

stage. But the promoters determined not to look back, and made arrangements for prosecuting the bill in the next session. Strange to say, the bill then passed both Houses almost without opposition. The mode by which these noble lords and influential landed proprietors had been 'conciliated' was the simple fact that the estimate for land was nearly trebled, and that the owners were paid about £750,000 for what had been originally [and we may be sure very excessively] estimated at £250,000."<sup>1</sup> At last these unjust judges in their own cause learned something of the value of railways to their estates. "Landlords found they could get higher rents for farms near a railway. They became clamorous for 'sidings.' Owners who had fought the promoters before Parliament, and compelled them to pass their domains at a distance, at a vastly increased expense in tunnels and deviations, now petitioned for branches and nearer station accommodations."<sup>2</sup> The Marquis of Bristol, speaking in favor of a line, said with magnanimous effusion, "If necessary, they may make a tunnel beneath my drawing-room;"<sup>3</sup> and Dr. Arnold of Rugby, as he stood watching a train from a bridge over the Birmingham railway, exclaimed, "I rejoice to see it, and to think that feudalism is gone forever; it is so great a blessing to think that any one evil is really extinct." Had Dr. Arnold survived to the year 1878, he would have seen that feudalism is still rampant in Great Britain.

The British Parliament has been lately engaged in discussing the reform of rural government. The foundation of rural government in England remains as it has ever been, the possession of land. The lord-lieutenant, the highest officer in the county, nominated by the Crown, is always, as a matter of course, a great landowner. A lord-lieutenant who had not a large and entailed estate in the county is simply unimaginable. If a person of fair character chooses to invest, say, £20,000 in a landed estate, he has no difficulty, especially if he be a Churchman and not opposed to the political policy of the lord-lieutenant, in becoming a justice of the peace. Then he is a member of Quarter Sessions, and *ex-officio* member of the Board of Guardians and of other local bodies. From first to last rural govern-

<sup>1</sup> Smiles' Life of Robert Stephenson.

<sup>2</sup> Ibid.

<sup>3</sup> Ibid.

ment is based on property ; even the elected guardian of the poor must be "qualified," and in his election the landlord may give six votes, while the laboring-man is a mute and unrepresented subject in a system which is not merely concerned with expenditure, but with extensive powers affecting personal rights. It has been truly said of our rural government that "we have a chaos as regards authorities, a chaos as regards rates, and a worse chaos than all as regards areas." I am convinced that this chaotic condition results from attempts to unite the legitimate principle of representation with the illegitimate and feudalistic principle of government by acreage, and that at present the latter principle predominates under the protection of Parliament. The rural administration of the law by landlords is tainted at the source of their authority. They are for the most part upright, independent, kindly-hearted men ; but they are essentially representatives of property, and their judgments are remarkable for tenderness to rights of property and comparative disregard for the more important rights of persons. Mr. Crompton, a well-known barrister, in a recent lecture upon "The Reform of the Magistracy and of the Laws relating to Summary Justice," said, "I have for many years watched the administration of criminal justice, and one of its worst features is the extraordinary leniency with which crimes of violence are treated as compared with the severity with which crimes against property are punished." From the representative seat of the divine principle of justice, the people of our counties have been taught again and again that it is a more heinous offence to strike a hare to death in a public road than to a bruise a wife ; that it is worse to steal a plant from a garden or a stick from a hedge than to neglect an aged parent or an infant child ; and I say that this flaw—a fault not doubtful, but admitted and observed by all—is chargeable to the fact that our land system has for its object the establishment, with all their privileges and powers, of the landed gentry.

There is no difficulty whatever in deducing the long supremacy of the landed interest in Great Britain from the annals of taxation. There is no tax the principle of which has been more widely accepted and adopted than a land-tax. "In most countries of Europe," said Mr. John Stuart Mill, "the right to tax,

as exigency might require, an indefinite portion of the rent of land has never been allowed to slumber. In several parts of the Continent the land-tax forms a large proportion of the public revenues, and has always been confessedly liable to be raised and lowered without reference to other taxes. In England, the land-tax has not been varied since the early part of the last century." In 1660, the landlords, liable in respect of their lands to many feudal dues and services, had restored monarchy in the person of Charles II., the worst sovereign that ever reigned in London. There have been monarchs as wasteful, as sensual, as frivolous as the second Charles, but our history does not supply a parallel to his squandering the affections of a people. To him, more perhaps than to any other sovereign, much in this way was given ; it was required of him, who was not without experience of adversity, that this wealth of opportunity should not be wasted. But by Charles all this was shamelessly, wantonly wasted ; and for his misconduct no body of men were so responsible as those landed cavaliers who ruled in the Convention, and who taught him, by their dealings with taxation and in other ways, that the people existed in order that their rulers might enjoy wealth, luxury, and indulgence.

It was the Convention Parliament which resolved to commute these feudal dues into a fixed sum, to be given as supply to the king. The first idea was that it should be paid as a land-rate or tax, which was clearly equitable, because the dues to be dealt with formed in fact the charge, in consideration of the payment of which they held their lands from the king, as representative of the State. But the majority eagerly seized upon a proposal to transfer the charge from themselves to the people, who were then so helpless. Six months after Charles had landed at Dover, the Convention resolved that instead of a rent-charge upon their lands, the people should pay a tax of 15*d.* per barrel upon all beer and ale, and a proportionate sum upon all other liquors *sold* in the kingdom. Their object would have been less clear, their conduct less scandalous, had they not been careful to exempt themselves from any share of this taxation by relieving the home-brewed beer and liquors in their own cellars from the charge. There were members who contended that "the land ought to pay ; it ought not to be charged upon the poor

people by way of excise." Mr. Prynne protested against this way of making "free the nobility."<sup>1</sup> However, the thing was done, and many things of the same sort have been done since that period. In this connection, we must glance at the Succession Duty. We need not look further back than 1780. In that year Mr. Pitt introduced a Legacy Bill, providing for the payment of duty upon both real and personal estate. By landlord influence the bill was cut in two; the Commons passed both, but in the House of Lords the bill relating to personalty only was accepted, and the charge which would have fallen upon their lordships was by them rejected. For seventy years—years of terrible expenditure—the landed interest enjoyed this audacious exemption. But I think it would be unjust to assume that the nobility did this in the mere lust of power, in sheer insolence of authority. It is more fair and much more agreeable to hold, as I am inclined to do, that they looked upon the British institution of life-tenure as a thing to be encouraged at all costs, even by the sacrifice of justice, and upon the custom of settling estates as the very ark of the covenant. Of course they exempted settled personalty from the tax. While I cannot exonerate the peers from a selfish and inconsiderate regard for their own exclusive interests in rejecting Mr. Pitt's bill, I admit they were to some extent blinded by a belief in the virtues of entail and strict settlement which I hope the further experience of a hundred years has driven from the minds of those to whom the reality of power has now been transferred.

In 1853 there arose a master of finance in England greater even than Mr. Pitt, who essayed in his first budget to march out against the Goliath of privilege. Mr. Gladstone's language was most wary. He proposed "that the exemption of real property should no longer exist," and "that the exemption of settled personalty should no longer exist." But he had no power to burst the bonds of settlement, and so he was constrained to enact that the exemption of land should continue in this form—viz., that the charge upon ratable property should be upon the life-interest of the legatee or inheritor, and not, as in the case of personalty, whether settled or not settled, upon the full

<sup>1</sup> Parliamentary History, 146.

value of the legacy or inheritance. It was impossible for the House of Lords in the latter half of the nineteenth century to reject a proposal thus attenuated in their favor. Mr. Gladstone followed the line of his distinguished predecessor in proposing, as did Mr. Pitt, that this tax on land should be payable by eight half-yearly instalments. His bill, no less than that of Mr. Pitt, did homage to the great principle of life-tenure, which is now understood to be the bane of British agriculture. The tax must not be equitable, because, as Mr. Gladstone said in making his proposal, "as a matter of fact, under the social arrangements of this country, our great estates are settled estates."<sup>1</sup> And because "our great estates are settled estates" Mr. Gladstone was obliged to exempt from the duty on capital value those which were not settled estates. Ostensibly the difference was accepted because of the liability of ratable property to local charges, which in England are very heavy.

We must now make a reference to this subject of local taxation, especially with regard to pauperism. We have a statement, authentic and official, of the amount which land, exclusive of houses, paid towards imperial taxation in 1870. Mr. Goschen stated as the result of prolonged and laborious inquiry, that "with respect to amount, land by itself pays only £3,000,000 out of the £65,000,000 of taxation, and the percentage is 5½ per cent."<sup>2</sup> "In Holland land pays 9 per cent; in Austria, 17½ per cent; in France, 18½ per cent; in Belgium, 20½ per cent; and in Hungary, 32½ per cent."<sup>3</sup> That is how the case stands as to imperial taxation. As to local taxation, I am firmly convinced that what is curable in pauperism, which is the chief item, has been caused by the want of independence natural to a people reared in a country which from time immemorial has been divided into great estates, which, as Mr. Gladstone said, are all "settled estates." We can find nothing in local taxation to set aside the eloquent warning which Cobden delivered when he said, "I warn landowners and the aristocracy of the country against forcing upon the attention of the middle and industrious classes the subject of taxation. For great as I consider the grievance of the protective system, mighty as I

<sup>1</sup> Financial Statement, April 18th, 1853.

<sup>2</sup> Local Taxation.

<sup>3</sup> Ibid.

consider the fraud and injustice of the Corn Laws, I verily believe, if you were to bring forward the history of taxation in this country for the last one hundred and fifty years, you will find as black a record against the landowners as even in the Corn Law itself. I warn them against ripping up the subject of taxation. . . . If they force us to understand how they have managed to exempt themselves from the probate and legacy duty on real property ; how they have managed, sweet innocents that taxed themselves so heavily, to transmit their estates from sire to son without tax or duties, while the tradesman who has accumulated by thrifty means his small modicum of fortune is subject at his death to taxes and stamps before his children can inherit his property ; if they force us to understand how they have exempted their tenants' houses from taxes, their tenants' horses from taxes, their dogs from taxes, their draining-tiles from taxes—if they force these things to be understood, they will be making as rueful a bargain as they have already made by resisting the abolition of the Corn Law. Again and again I warn the aristocracy that they do not force us into a discussion of the peculiar burthens upon land."

Well, they have forced us into this discussion by raising a loud and continuous cry against the pressure of local taxation. The local burdens upon land are heavy indeed. But I contend that they are in great part the vicious consequence of our land system ; that they are, in fact, the price of maintaining that ownerless condition of the soil which is regarded as the bulwark of the landed gentry. Pauperism, the peculiar curse of wealthy England, is hereditary in the counties where landlordism has most extended and unmitigated sway. Mr. Goschen, in his book on "Local Taxation," says (p. 155) : "In many counties pauperism is actually hereditary, and throughout the whole of this century such counties have been amongst the highest rated on account of the administration of the Poor Law. I do not wish to exhibit the list of peccant counties in this respect, but, singularly enough, they are, with only one exception, all situated in the South of England. If a line were drawn across the country from west to east, from Monmouth to the Wash, there would be found below it all the counties in which the rates are above the average, with one single excep-

tion." Mr. Goschen is surely too sagacious to have in his own mind any conviction that this is "singular," or any doubt that it is other than the certain and inevitable result of laws and customs which forbid free land. Why should the sparsely populated agricultural division of England be more pauperized than the northern and manufacturing division? Good agriculture does not breed paupers; of all industries it is that in which feeble and unskilled labor can most easily win reward. The soil of England might be redeemed from a great part of this incubus, which is a portion of the terrible tribute we have paid, and are still paying, in respect to that stupid, ingrained superstition that our land must be held by life-tenure rather than as freehold, because such is the pleasure of the landed gentry.

Many can repress pauperism more easily than few; when the ownership of land is widely diffused, the able-bodied applicant for relief will be much more shy of presenting himself. Our Poor Law does not differ in principle from what it was when Mr. Malthus wrote, "I feel persuaded that if the poor laws had never existed in this country, though there might have been a few more instances of very severe distress, the aggregate mass of happiness among the common people would have been much greater than it is at present. . . . A man who might not be deterred from going to the ale-house from the consideration that on his death or sickness he should leave his wife and family upon the parish, might yet hesitate in thus dissipating his earnings if he were assured that in either of these cases his family must starve or be left to the support of casual bounty. . . . The poor laws are strongly calculated to eradicate a spirit of independence."<sup>1</sup> Professor Fawcett, in his work on "Pauperism, its Causes and Remedies," has said that "such warnings were as absolutely unheeded then as they would be now. It was thought sufficient to say that Malthusianism was hard-hearted and degrading. The words of warning have, however, lost none of their significance. Assume that all the social and economic reforms which are most popular were secured; suppose, for instance, that the national debt was paid off; that standing armies were abolished; that primogeniture and entail

<sup>1</sup> "On the Principle of Population," chap. vi.

were things of the past, and that the land was more equally divided. All this might take place, and in a few years every thing would be in as unsatisfactory a condition as before, unless these reforms were accompanied by a more general development of prudential habits." This is true; but surely it is also true that these prudential habits would follow upon the greater diffusion of property in land. In regard to such habits, we are undoubtedly the least prudent people of the world. Must we then suppose that this imprudence is peculiar and ineradicable? Is it not more rational to ascribe it to the unique condition of the British people in regard to that chiefest of all schools for thrift, frugality, and prudence—the possession of land?

Who that journeys without thought in rural England would suppose that he was traversing an island containing one of the densest populations of Europe? Our people are forced, by the institution of a landed gentry, into towns. Great Britain and Ireland contain 55 towns, of which the population is 40,000 and upwards; France has but 28 of such towns; Italy only 24; Russia no more than 14, and Austria has 6.<sup>1</sup> But in every one of those 55 towns, as in every town of lesser population, the evil of the British land system is distinctly felt. Generally the larger part of the area covered by the town is "settled land." A freehold cannot be obtained. The nobles for their own advantage have in many towns established by various acts of Parliament a quasi-freehold, by obtaining special power to grant leases for terms varying from 500 to 999 years. The latter is the common form of tenure of the land on which the great factories in the north are erected. In London the Dukes of Westminster, Portland, and Bedford are the largest of the many noble proprietors; and their great estates are let on building leases for 60, 80, and 99 years. The Duke of Westminster is the owner of all the most fashionable—the Belgravian—quarter, and no site for a house can be obtained there for longer than the residue of a 99 years' lease. Is it likely that London will be built of stone and marble when all erections on the land must be abandoned to the noble incumbent in so brief a period? I might fill a whole number of the PRINCETON REVIEW with a

<sup>1</sup> *Journal of Statistical Society*, vol. xxxviii. p. 379.

description, from sanitary, æsthetic, and economic points of view, of the ill effects which result from the fettered condition of the urban land in and around the towns and cities of the United Kingdom. But I feel that I must on this occasion reserve sufficient space to say something of the teaching by which the British people are instructed to be content with a state of things which has weighted them heavily in commercial competition, and which would not have been so long endured were it not that the natural wealth and advantages of the country have rendered them blind to the burden.

Primogeniture, entail, settlement, and large farms are articles of faith in England. Lord Chancellor Cairns, a shrewd, hard-headed man from the North of Ireland, defended primogeniture in 1854 with the argument that primogeniture is favorable to agriculture, because it tends to large estates and large estates tend to large farms. There is no matter connected with the ownership and occupation of the soil which has been the subject of more thoughtless dogmatism and ill-considered judgment than that of small farming—or, as it is generally described, peasant proprietorship. The idea is so extremely opposed to the actual distribution of British land that perhaps this is not surprising. There is an extraordinary ignorance in the British mind concerning this not unimportant matter. If, in any ordinary company, we were to hazard an opinion favorable to the results of peasant proprietorship, it is probable that some one in a tone of authority, with the air of superior knowledge, would expect the topic to be set aside by a reference to the potato famine of 1846 in Ireland, and to the subsequent depopulation of that island. It is likely indeed that if the subject of peasant proprietorship were raised in Parliament, a large majority of those who spoke in favor of the distribution resulting from entails and settlements would allude with decisive emphasis to the case of Ireland. I can almost fancy that Lord Derby himself was confounding tenancy with ownership when he said in 1871, “Of course a man may go on after the fashion of the Irish cottiers, scratching the earth for a bare subsistence; but that is not farming, and I am only repeating an opinion I have often expressed before, and which I hold very strongly, when I say that the cottier, the peasant cultivator, honest and

industrious and frugal as he may be, has just as much chance of holding his own against the combination of capital and science as bows and arrows have of superseding breech-loading rifles, or hand-loom weaving of driving the power-loom out of the field."

That is a highly respectable example of the style of oratory by which the idea of peasant proprietorship has been dismissed from the minds of multitudes in England. Lord Derby may be aware, but the many are certainly not aware, that peasant proprietorship has never been established in Ireland. If a people engage, though it be with a spade, in agriculture, and are "honest, industrious, and frugal," how should they come to desolation? The Irish cottier did not deserve this encomium. He lived under a system which was not distinguished for "honesty;" he was not "industrious," nor was he "frugal." If he lived on potatoes, and died miserably when potatoes failed, it was because he could not help himself. He was a rack-rented tenant, living in constant remembrance that he had no encouragement to be industrious or frugal; that the improvement which every day's labor effected was not his own, but was absolutely the property of another, and might be made use of as a plea for raising his rent. "Ireland," says Mr. Thornton, "is one of the few countries in which there neither are nor ever were peasant properties. From the earliest appropriation of the soil down to the present day, estates have always been of considerable size, and though these estates are now cut up into many small holdings, the actual occupiers of the soil, far from being landowners, are not even leaseholders, but are rack-rented tenants at will. In this single phrase may be found a complete explanation of all the evils of their condition and all the defects of their character. They are indolent because they have no inducement to work after they have obtained from their labor wherewithal to pay their rent and to save themselves from starvation. Whatever additional produce they might raise would only subject them to additional exactions. They are careless of the future because they cannot by taking thought improve the gloomy prospects of the morrow; they are reduced to the verge of destitution because they are permitted to retain no more of the fruits of their labor than will barely suffice for their subsistence; and they set at naught all other laws, divine

and human, partly in obedience to the first law of nature, that of self-preservation, and partly because familiarity with misery has rendered them desperate."<sup>1</sup> Wherever we meet with peasant holders as a numerous body, we shall find this want of "honesty" on the part of their landlords and this want of "industry" and of true "frugality" on the part of the tenants. Look where we will, we shall find little that is admirable or useful resulting from peasant holdings; and look where we will, we shall find the peasant proprietor, where the land is free from "settlement," and where the transfer is simple, inexpensive, and secure, where the method of small farming is well understood and established—we shall find him not only holding his own, not only displaying a high degree of honesty, industry, and frugality, but also making a larger produce than the farmers of any other class in the same country. In Ireland small proprietorship has been unknown; in England it has disappeared in consequence of the system of entails, settlements, and transfer.

The establishment of a peasant proprietary forms no part of my plan of reform. It is contended that, as a result of "free land," a large and increasing proportion of the proprietary would be of this character. Foreign observers frequently remark upon the political peril of England owing to the unnatural distribution of the soil consequent upon the survival of feudal methods. M. de Laveleye, a writer of great authority, says that "the distribution of a number of small properties among the peasantry forms a kind of rampart and safeguard for the holders of large estates, and peasant property may without exaggeration be called the lightning-conductor that averts from society dangers which might otherwise lead to violent catastrophes. The concentration of land in large estates among a small number of families is a sort of provocation of levelling legislative measures. The position of England, so enviable in many respects, seems to me to be in this respect full of danger for the future."<sup>2</sup> People who prophesy terrible things concerning the future of England will be in error, because the power for reform is unquestionably in possession of the people. But then, on the

<sup>1</sup> "Ireland, Past, Present, and Future." By W. T. Thornton, C.B. 1848.

<sup>2</sup> Cobden Club Essays, First Series.

other hand, I would say that in Russia, where authority is not with the people, the mistake would be equally great, because there the land substantially belongs to the people. The hold of the people upon the soil of Russia will tend to secure steadiness, though in so poor a country progress must be slow. Consider that which the Military Correspondent of the *Times* in Bulgaria wrote of the Russian soldier: "A popular fallacy in England is that the Russian soldier lives in an atmosphere of blows—that the knout and the stick are his only ruling motives. The fact is that nowhere, not even among the Germans, is the soldier managed more entirely by moral means. A word or even a look from his officer suffices. He seems to feel a reproof—and it is rarely deserved—as much as an Englishman would a blow. *The bulk of the Russian privates are themselves small landowners, and have an interest and a stake in the country accordingly.*"<sup>1</sup> The Russians cherish the wide distribution of their land as a political security against a proletariat and against pauperism. They see that pauperism is an English specialty, the prominence of which they, I think rightly, ascribe to our laws and customs concerning the tenure of land.

If free land be pernicious, if small farms tend to ruin, if to be entailed and settled and to be ownerless be the proper condition of the European dominions of the Queen, then we may ask, why are these boons and blessings withheld from the Channel Islands, where the average size of the farms is about ten acres? Virtually without interruption these islands have been held with the English Crown since the Norman Conquest. Entail has been specially permitted in the case of several small estates, but just as the bulk of Great Britain is no-man's land, so that of these islands is and always has been as salable as the wheat and potatoes which it produces. It is contended that the price of land in England is so high that none but the rich can afford to possess it. What folly and ignorance there is in this remark! In which island, for example (the truth would be equally evident if we were to take Belgium, France, or Switzerland for comparison), would it be supposed that land of equal quality is more valuable—in England or in Jersey? Ninety-nine

<sup>1</sup> *Times*, October 16th, 1877.

people out of a hundred would reply, "England, of course; land must be worth more in England than in Jersey." Land, it would be said, in the larger island is not simply land: it is the best security in the surest place. Nor is that by any means all. Land in England has near at hand, within reach by road, by rail, by canal, the richest people in the world, together with the most populous and luxurious city as purchasers of its fruit; all other competitors must send their produce by sea; the British landowner has the dearest markets always at command. But even that is not all. The purchaser may desire to have a vote for a county; he may increase his bidding not merely with the wish of becoming an elector, but of seeing his name on the commission as a justice of the peace; and if the area be large, he may be consciously bidding for a place not only in county society, but towards a baronetcy or even a peerage, for after all these things do the British purchasers of land seek. Who could doubt that the price of land is higher in England than in Jersey, where no peer of the realm cares to live? Land, we are given to understand, belongs to the rich because they are rich; and, as the people of Jersey are people of very moderate fortune, as none of them use land as a "luxury," which is the character we are told that it bears in England, of course the price is lower in the smaller island. But indeed the very opposite is the truth. It is an indisputable fact that the price of agricultural land in Jersey is very much higher than in England.

How indeed should it be otherwise? "To improve land with profit," says Adam Smith, most truly, "like all other commercial projects, requires an exact attention to small savings and small gains, of which a man born to a great fortune, even though naturally frugal, is very seldom capable. The situation of such a person naturally disposes him to attend rather to ornament, which pleases his fancy, than to profit, for which he has so little occasion. He embellishes, perhaps, four or five hundred acres in the neighborhood of his house, at ten times the expense which the land is worth after all his improvements, and finds that if he was to improve all his estate in the same manner, and he has little taste for any other, he would be a bankrupt before he had finished the tenth part of it."<sup>1</sup> In another page

<sup>1</sup> "Wealth of Nations," book iii., chap. ii.

Smith has drawn a picture of the "small proprietor who knows every part of his little territory, who views it with all the affection which property, especially small property, naturally inspires, and who upon that account naturally takes pleasure in not only cultivating, but in adorning it, is generally of all improvers the most industrious, the most intelligent, and the most successful."

Look at him in Belgium! That is a country, like England, of great manufacturing industry. But it is a country of very inferior soil. It is, however, a country from which we may learn the error of that British dogma—that large farms are invariably more productive than small farms. Who desires to comprehend the spirit that animates small proprietors, "let him," Professor Cliffe Leslie advises after personal observation of the facts, "for instance, look round the roots of the lean firs beside the station of Mille Pommes, the next station to St. Nicholas, in the Pays de Waes. What would an English farmer give for land like that—what could he make of it? What the Fleming will give for it, and what small farming can make of it, may be stated in figures. By the side of a cultivated hectare which would sell for £120, a hectare in a state of nature sells for £12. To a landlord not meaning to be an occupier, such land, which is much like many of the uninclosed lands in Surrey, would be worth £12; he could make 3 or 4 per cent by letting it for sporting. But the peasant makes 10 per cent, and the value—which he would never impart were he not the owner—doubles and doubles and doubles. The £12 are given for the natural hectare only because it can afterwards be made worth £120. It is potential value only, or, in other words, room for the peasant to work in; for the bestowal of his time, his thrift, and his long labor of love that the hectare brings of its own."<sup>1</sup> Contrast this, which is characteristic everywhere of land where there is simplicity of transfer, and no wholesale withdrawal of land from market by entail and settlement—contrast this with Sir Robert Peel's description of English agriculture in his letter to Mr. Caird: "You will find immense tracts of good land in counties with good roads, good markets, and a moist climate, that remain

<sup>1</sup> "Land Systems." By Cliffe Leslie, LL.B.

pretty nearly in a state of nature. Nothing has hitherto been effectual in awakening the proprietors to a sense of their own interests.”<sup>1</sup>

It is common, in making comparison between English and Belgian agriculture, to dismiss the matter with a decisive reference to the larger production of wheat per acre in England. As for the newer sort of crops, it is one of what Mrs. Norton called “dear, boastful England’s proudest blind boasts,” that she invented them all. Yet it is to the land now known as Belgium that we owe the hop and the carrot, and, from an early work on English agriculture, written in 1650 by Sir Richard Weston, upon “The Husbandry used in Brabant and Flanders,” and further entitled “A Discourse showing Wonderful Improvement of Land there, and Serving as a Pattern for our Improvement in this Commonwealth,” it appears that persons then living recollect “the first gardener who came into Surrey to plant cabbages, cauliflowers, and to sow turnips, carrots and parsnips, pease, all of which at that time were great wonders, we having few or none but what came from Holland and Flanders.” Farming in Flanders has always been “small farming,” and it is from thence also, Weston states, that Englishmen learned the value of crops of clover. But to return to wheat—a crop for which the sandy soil of Belgium is peculiarly unsuitable. Peasant proprietorship is denounced because the yield of wheat per acre is inferior to that of England, and the case of large farms against small farms is tried and decided upon this single issue. To prove that this is a false issue, it will be sufficient to show that there are large farms in Belgium, and that these produce much less wheat per acre than the small farms, and that of the small farms the least productive are those which do not belong to the cultivators, but are farmed by rack-rented peasants upon short leases or yearly tenancies. The large farms of Belgium are in the south-east: in Hainault, Liège, Namur, and Luxembourg. West and East Flanders, in the opposite direction, are much subdivided. It is recorded in official tables that the proportion of farms of 100 hectares and upwards in the two last provinces is respectively .002 and .001 per cent, while in

<sup>1</sup> “British Agriculture.” By James Caird, C.B., F.R.S.

the former the figures are 0.11, 0.26, 0.93, 0.77.<sup>1</sup> The cultivation of Flanders is far superior to that of the eastern provinces. Of those provinces M. de Laveleye writes : " The Condroz [provinces of Namur and Liège] is the region of Belgium which counts the greatest number of large farms ; those which reach 250 acres, so rare in the Flemish provinces, being met here often enough. As soon as a farm is divided in Le Condroz the land is better cultivated and the number of cattle increases. The small proprietors who farm their own five or six acres know no fallow : their crops are more varied and better kept ; the produce is much larger ; they raise beetroot, colza, and turnips ; their corn is taller and carries more grain. Thus, then, a too large size of the farms is one cause of the inferiority of the farming in Condroz."<sup>2</sup> M. de Laveleye has compiled a table showing that the small-farm provinces, the Flanders, have more cattle, more produce, are more carefully cultivated, and have more agricultural capital than the provinces in which large farms predominate. In the table East Flanders is especially compared with Namur, and it is to be noticed that in the former the land is poorer than in the latter province :

	Namur.	East Flanders.
Heads of cattle per 100 hectares.....	35	68
Working capital per hectare.....francs	250	450
Produce per hectare .....	" 300	" 600
Rent per hectare....."	50	" 93
Average selling price of land per hectare.. "	1,804	" 3,218
No. of inhabitants per 100 hectares.....	138	263

It is the same everywhere. In Lombardy, in the province of Como, where small farming prevails, the value of the cattle per hectare in cultivation is 161, whilst in the province of Mantua, with its large farms and fine pasture land, it is but 94 francs.<sup>3</sup> In France agricultural land fetches higher prices than land of similar quality in England, and the reported average produce of France is diminished by including the inferior yield of large farms. Another error is the supposition that the division of land in France is solely due to the law of succession. It is largely owing to the fact that the French peasant is the

<sup>1</sup> Cobden Club Essays, 1870, p. 244. <sup>2</sup> "Economie Rurale de la Belgique."

<sup>3</sup> "La proprietâ fondiaria in Lombardia." Sig. Tacini.

great *buyer* of land. Those who desire to reform the land-laws of the United Kingdom do not seek to introduce the French law of compulsory division. The English people take a commonplace view of the truth scientifically put by Sir Henry Maine, that in France "they have established a system of small perpetual entails which is infinitely nearer akin to the system of feudal Europe than would be a perfect liberty of bequest."<sup>1</sup> We say that if the power of settling life-estates in land were abolished, if the transfer were made simple, decisive, and inexpensive by registration of indefeasible title upon a system like that established in Australia, including of course the registration of charges and mortgages, the consequences would be (1) an active competition for small lots of agricultural land, (2) a large increase of farming capital, (3) a great addition to the number of owners and a disposition to sell land in small lots, and (4) that the tendency, which is a grave political danger as well as a hindrance to production, towards a diminution in the number of landowners would thus be arrested and reversed.

We have seen that the distribution of land in the United Kingdom is not the result of economic laws. The large farms of England are far more productive than the large farms of the Continent, because they are better supplied with capital; but they produce less than the small farms of the Channel Islands, and less than many of the small farms of the Continent. The reason why these small farms are more productive is probably the same as that which makes the large farms of England produce more than those of the Continent. It is a question of capital. Frenchmen have been known to take a large farm with a capital of 10s. an acre, and we have it on high authority that £20 an acre would not be too much. It is probable that, in money or salable stock, British farmers have a capital considerably larger than that of the peasants of Jersey or Flanders. But the calculators who have upheld this opinion have for the most part forgotten to value the peasant and his family, who, toiling from morning till night, are certainly worth £500. It is moreover a common error to suppose that there is of necessity great economy in large agricultural operations, and that therefore a

<sup>1</sup> "Ancient Law," chap. vii.

good income is easily earned in "wages of superintendence" by large farmers. This is the mistake underlying that speech by Lord Derby to which reference has been made. He assumed that the small cultivator, "honest, industrious, and frugal," was one who must always be in antagonism to the "combination of capital and science," just as is the hand-loom weaver, or the savage fighting with bow and arrow against breech-loaders. But that is a fallacy. The combination of capital and science in the costly form of a steam threshing-machine is quite as universal among the small cultivators of Jersey and Flanders as in any part of England. The fact is that this combination has become too much for the large farmers. Each one of them does not and cannot purchase and maintain for himself a steam-plough at £800, or a steam threshing-machine at £300. If ten small farmers join together to work a steam threshing-machine, as they do every day in Jersey, they may unite in laying their lands open to a steam-plough. And of this we may be sure, that the future of agriculture will tend to be divided betwixt hand-labor and steam-power—the spade and the steam-plough.

There is a wide difference between the labor and the cost of eight horses and those of an engine of eight horse-power. It is expensive to attempt and impossible to succeed in making eight horses pull all together and with continuously equal strain. This is, however, accomplished with perfect success by one hand upon a steam-engine. A horse, which costs at least 2s. for care and keep for five hours, cannot work longer than that time. Continued labor during five hours is a full day's work for horses at plough. A single horse-power in a steam-engine is in other words the evaporation of six gallons or sixty pounds of water per hour, and with an engine of good construction 12 pounds of coal, worth 5 farthings, will give a power equivalent to that of a horse costing 2s. The general application of steam-power to the cultivation of the soil, and to the carriage of produce on country roads, may be deferred, but it must ultimately be accomplished; and perhaps the time is not very distant when it will appear as strange that a farmer of heavy land should allow his subsoil to be injuriously trodden into a water-bearing stratum by four horses dragging a plough as that a Lancashire weaver should fill his sheds with hand-looms.

Before we quit the subject it would be well to glance at the work of Mr. James Howard, M.P., an eminent manufacturer of agricultural implements, and a careful though somewhat prejudiced inquirer into matters relating to "Continental Farming and Peasantry," which is the title of a book published by Mr. Howard in 1870. It deserves notice not only for its intrinsic merits, but because it was received with something like enthusiasm by those who are opposed to the ideas of the present writer. Subdivision in France is most notable in the north-west. But even in the Department of the North, about Valenciennes, Mr. Howard tells us there are farms of 400 to 600 acres; though we have the report of M. Hamoir, the best-known agriculturist of the province, to the effect that twenty-five acres are considered a large extent, and that ten acres may be taken as the average. M. Hamoir has known agricultural land in that part of France sell as high (to peasant proprietors) as £192 an acre. As usual with large farmers or proprietors, he deprecates such an outlay; he thinks it "better that the small farmer should not be a proprietor or landowner at the price he pays." Then M. Hamoir, using the very argument which is employed in England to prove that if we had free land the small capitalist would *not* buy, says: "The interest of his money invested in ordinary securities would permit him to hire, even at a high rate, double the quantity of land that he could hold as an owner; but he does not enter upon this path." Now, here is a phenomenon! This French peasant, taxed all over the world with morbid thrift, with unnatural frugality, is told that he is reckless in the outlay of his painful savings, and the larger landowners and farmers in France and in other countries look upon him as a stubborn, contumacious animal, with a faculty for existing upon hard fare and for raising the price of land to unheard-of figures. Is this likely to be true? Is it reasonable to suppose that the people who generation after generation have put sou to sou and franc to franc, till a sum has been collected for a purchase, would be thus duped in their expenditure? M. Hamoir, to do him justice, is not so ignorant as to believe this. But he gives, in Mr. Howard's pages, a subordinate place to that which is the real and abundantly sufficient motive. These purchases are the result of prudence, not of ignorance. The peasants know that

their unremitting labor will turn sand to gold, and that there is but one way to security—that of ownership. As M. Hamoir puts it, “the peasant fears the short duration of leases, at the end of which he fears to be ousted for some competitor.” There it is; that is the whole story—the full confirmation of my argument. To be secure, the cultivator must be the proprietor.

In dealing with the cost of a landed gentry in the United Kingdom I have strictly confined myself to the tenure of land. I believe I have established in the minds of all who have given fair consideration to these statements a conviction that, with adequate reform, there would be a large increase in the home-grown supply of food and of all useful and beneficial enterprises connected with the land; that there would be farming proprietors, not established by force of any compulsory law of subdivision, but establishing themselves by natural selection of the fittest for such occupation, in which the right men could afford to give, and would be prepared to pay, much higher prices than are now obtained for agricultural land. I have myself no fear whatever that the dwindling in the number of agricultural land-owners, which is now a dangerous feature of our social system, would not be arrested if the soil of the country were liberated from settlement and the transfer of land were secure and simple; and, as Mr. J. S. Mill has truly said, “whatever facilitates land passing into new hands tends to increase its productivity, and thereby its usefulness, to the nation at large; since those among the owners who are least provided with skill, enterprise, and capital are those who are under the strongest inducements to sell their land.”

ARTHUR ARNOLD.

## THE ANGLO-CATHOLIC MOVEMENT, PAST AND FUTURE.

THE are several reasons why it seems especially desirable, at the present time, to undertake a careful and candid review of the past, and to glance at the possible future, of the great spiritual and ecclesiastical movement to which the title is commonly assigned which forms part of the heading of this article. The Anglo-Catholic movement has equally affected the Churches of America and England ; and no just estimate of the present characteristics of the Church movement in either of those great Christian communities can possibly be formed without a careful consideration of the early aims, development, and history of what by general consent is now called Anglo-Catholicism, or, in other words, the Oxford movement of five-and-forty years ago.

The chief reasons why such a review may be profitably attempted at the present time would appear to be as follows : First, that there seem to be many grounds for thinking that the movement, under its old aspects, is becoming spent ; that also, in part, it is approaching that goal towards which it has been silently but steadily advancing ; in its larger and better part is at last appreciating the perilous nature of recent developments, and the need of a reconsideration of the whole position. The movement in its original form has apparently passed through all its phases, and we now have arrived, in the case of some who claim to belong to the movement, at what seems to be, by the very nature of the case, the last—resistance to authority as at present constituted, and a determination to maintain an attitude which, in England, is irreconcilable with the present relations of the Church and the

State, and which, in America, is becoming more and more incompatible with that order and loyalty which are the essentials of a Christian Church.

There is another reason why, at this particular time, it seems desirable to undertake the survey that is contemplated in the present article, and it is this: that the movement has certainly failed to countervail the influences which it was originally designed to oppose; and that if change or rehabilitation is now near at hand, a due consideration must be given to the original principles of the movement, and especially to those vitiating elements which have hitherto prevented it accomplishing its clearly announced and deliberate purpose. As we now know, on the authority of those who had most to do with the early aims and efforts of the Oxford movement, it was not specially designed to oppose the Evangelical school of thought, but the liberal principles in religion that were disclosing themselves at that period of change and agitation, which was so nearly contemporaneous with the appearance of the "Tracts for the Times."

Now, that it has failed to arrest this tendency to liberalism in religion and doctrine is perfectly certain. It has undoubtedly called out, and to some extent organized, a school of thought that has always consistently opposed itself to the liberal developments of the day, but it has never succeeded in turning the positions of the adversary. It has never produced any real effect on scepticism; nay, if the whole truth has to be told, it has, we fear, of late, by the extravagance of the sacerdotal assumptions, and the lawless opposition to authority of some of its self-styled adherents, aggravated much of the doubt, and given ground for much of the antagonism to the Church which is now unhappily current.

If this be so, it certainly is of prime importance, at a time like the present, to examine very carefully the general principles of a movement which, however much good it may have done in many other ways—and vast good confessedly it has done—has failed to solve the problem it proposed to itself, a problem which, if urgent fifty years ago, is incomparably more so now. The vital question then was, how to prevent the Church of England being liberalized. Can it be said that this

result has been secured when a preacher, under the most solemn circumstances, could give such a picture of the state of religious opinion in England as was indirectly given a couple of months since by Mr. Wilkinson in St. Paul's Cathedral, at the recent consecration of the Bishop of Lichfield? If, as was then asserted, we suffer from want of confidence in Christ, and from utter worldliness refuse to believe in life everlasting, rely on the popular opinion of the intellectual and the great, find our oracles in clubs, and spend our time in wondering at the power and beauty of the Beast of this world, the check given to liberal opinions cannot have been very serious, the lines of religious thought, as traced out in the great movement we are considering, cannot have converged with any thing like the effect which was originally hoped and anticipated.

A third and still more serious consideration why, at the present time, it would seem almost imperatively necessary to review the whole principles and tendencies of Anglo-Catholicism, is not only that the system has failed in its primary purpose, but that, under some of its present aspects and developments, it is working inimically to the Church of the Reformation, whether in England or America. Restoration of the corporate union of Christendom, and so, by necessary consequence, some form at least of reunion with Rome, is now, by some at least, actually avowed to be the ultimate solution of the Oxford movement; and public resolutions to this effect have been actually passed, only three or four months since, in the very city where the movement originally took place. Surely this alone is enough to induce us to re-examine the whole question, and to endeavor fairly to ascertain whether the movement has always involved these developments, or whether they are only an utter misapplication or perversion of its principles.

It is not for a moment denied that the movement has done good in many ways, and has advanced the cause of true religion and of reverential worship; but it is not only a fair, but a necessary, subject of inquiry whether there were not elements in the Oxford movement, almost from the first, which carried with them the grave consequences which we are now contemplating. In the sequel we hope to make it plain that

whereas Anglo-Catholicism originally rested on three principles, one of which was unchanging opposition to Rome, it was to the early neglect of this principle that all the evil may be ascribed which has been so lamentably disclosed during the last half generation. But we will not anticipate.

I. With these feelings on our minds of the need, and even the duty, of reconsidering the whole movement, we may now, under the guidance of those who have since disclosed to us what may be called the spiritual history of Anglo-Catholicism, review the circumstances of its rise and early progress, and the true nature of the principles which it involved from the very first.

We begin by looking backward fifty years, and bringing up, as far as we are able, the aspect and circumstances of those now well-nigh forgotten times. Fifty years ago! What a time of apathy and hopelessness, and yet how strangely marked by tokens of coming change! The "Christian Year," to which all the founders of the Oxford movement ascribe the first stirrings of the stagnant pool, had been published just a year, and was beginning to produce its effect on the minds of a few earnest thinkers, and especially on the mind of one to whom the whole movement owed more than to any other writer of those days—the devoted, enthusiastic, truth-seeking, keenly-logical, yet, at the same time, imperfectly-balanced thinker, John Henry Newman of Oriel. The year that followed, that is, the very year to which we have now in thought transported ourselves, a very different agency first came into existence—the *Record* newspaper—which, if we remember rightly, first appeared in the year 1828. It was designed to concentrate and reanimate the Evangelical party, and, whatever else may be said of it, it proved then, and continues to this very hour, to be a consistent and thoroughly efficient exponent of the views of the great party which it undertook to represent. Four or five years afterwards Dr. Newman wrote in it, as he himself tells us, a few letters on Church Reform, but the divergence between himself, though once of Evangelical opinions, and the editor soon became apparent, and the connection very speedily ceased.

The state of the Church of England, at the time we are now

considering, was singularly hopeless. Of the two great schools of thought, only the Evangelical had any degree of vitality, and that vitality was far from healthy or attractive. The love for souls, which had so nobly distinguished it fifty years before, was now dying out, and a cold and narrow exclusiveness was fast quenching that enthusiasm and glowing devotion which had breathed again the breath of life into the Church of England in the closing decades of the preceding century. The writer of this article, himself the son of a country clergyman, is now old enough to have some remembrance of those dull and dreary days. The only life that seemed to show itself was in the missionary field, and to some extent in the work of meetings of the Bible Society ; but it was not the bright and joyous life of an earnest and developing Church, but the lower life, sometimes selfish and exclusive, of the sect and the party. The shadows of Calvinism were resting on well-nigh one half of the Church of England in those dreary days. The young were chilled and saddened in all their higher aspirations ; the way of salvation seemed a narrow and joyless path ; the idea of a Church was something utterly unfelt and unrealized. The individual struggler and fighter of the "Pilgrim's Progress" formed the highest conception of the religious life with which the boy of those days could solace his more aspiring and his better thoughts. The books that were placed in his hands, if bearing on religious subjects, were commonly tinged with a sub-Calvinistic teaching which chilled and antagonized. There was no sunshine ; no appeal to the ages of Faith ; no stirring calls through the lives of the great and the good of the early days of the primitive Church ; nay, no genial teaching of that ever fresh and ever quickening gospel story, on which the young mind, if rightly directed, will always be found to dwell with an enthusiastic and almost impassioned interest. Religion was sombre and unattractive, and, especially in the persons of some of its exponents, seemed utterly irreconcilable with the brightness and love of a high-toned and chivalrous life.

Such, to the young at least, were the aspects of those weary days. Yet the change was near at hand. The "Christian Year," though at the time but imperfectly realized, seemed to disclose a new realm, and to give a reality to the dim aspirations of

the young churchman which it is easier to remember than to analyze. A feeling of Church unity and of corporate Church life gradually took the place of the anxious and often selfish individualism that was then the prevailing characteristic of the more earnest and religious minds of the time. It began to be felt that the Church of England was not merely the religious organization that supplied the spiritual needs of the passing age and generation ; it had its own splendid history ; it was a part and branch of the great primitive and Apostolic Church ; its ministers drew their long line in unbroken succession from him, and such as him, on whom the Lord had built his Church ; all that fellowship that the isolated spirit had dimly and almost hopelessly longed for was brought near ; the unconsciously lost had at last become realized and found.

These feelings were not by any means confined to the young. Though the effect of the "Christian Year," and of the views of which it was an exponent (for these things were then "in the air"), was principally observable in the young, yet it was perfectly clear that the greater portion of the old-fashioned High Church party were affected by the new teaching. It has been far too commonly assumed that the High Church party of fifty years ago were utterly inert and unsympathetic. This was certainly not the case in the provinces. Church life was no doubt low and feeble, the professional had almost entirely taken the place of the spiritual. Intercommunion was very limited, except through four-o'clock dinner parties and slowly circulating book-clubs ; still in every neighborhood there were quiet and thoughtful men who read the Caroline divines, and on whose study-tables books even of the strain of Walton's "Polyglot" were to be found far more frequently than in these days of high pressure and self-styled enlightenment. All this honorable body of men seemed to awaken as out of a long sleep, and to welcome the new thoughts and new stirrings of Church life of which the "Christian Year" was the earliest exponent. The Church of England was felt to have a history, and to reach backward to that pure and primitive Church on which it claimed to base its principles and practice. This Church realization soon showed itself in the quiet and honorable body of men of whom we are speaking—these High and

Dry, as they are commonly styled by the somewhat assumptive churchmen of our own times. Sunday-schools began to reflect a little higher teaching; the old parish church became something more to the higher spirits of the place than the monument of a past, with which the present had neither sympathy nor connection; the sacraments were slowly felt to be something more than prescribed rites; the Church at large a little more than a mere establishment. The old-fashioned High Church party were the first silently to welcome, and even, to a certain degree, to assimilate the new teaching, and when, four or five years later, the "Tracts for the Times" finally broke the spell of apathy and establishmentarian routine, there were found many in every diocese who were ready to welcome the revival of Church principles, and, as we have already termed it, the Church-realization which these remarkable papers so strikingly called out. The seed fell to a great degree on partially prepared ground. The same thoughts that found their exquisite and harmonious expression in the "Christian Year" had been for some time silently rising in many and true hearts, and, by the nature of the case, pre-eminently in the old historic High Church party, the genuine sons of the Reformation, and the truest, because, historically considered, the most lineal representatives of the Church of England. We say not this in any derogation of the other great party of the Church. The Evangelical party, by the blessing of the Holy Ghost, had almost exclusively, in the past fifty years, sustained the holy and blessed work of the revivification of the Church of England. They had brought back life; they had made salvation to be felt as something real and individual; they had rendered the Redeemer's own vital words as to personal conversion a deep subjective conviction and reality; they had been as the life-bearing wind that had swept over the dry bones of the valley—all this they had been, and may they be forever blessed, and honored for this work; but representatives of the Church of England in its historical aspects they never had been, nor indeed ever cared or claimed to be. The historical representatives of the Church of England were then, whatever they may have become in the future, that old High Church party—moderate, loyal, and staunchly anti-Ro-

manist—that, at the time we are now considering, were at last awaking from their long slumber, and preparing, hardly consciously, again to take their place in the history and developments of the national Church.

It is, we are persuaded, an utter mistake to refer the commencement of the great movement we are now considering simply to Oxford and the “Tracts for the Times.” The principles of which these Tracts were to a great extent the expressions had been showing themselves for at least ten years before, among quiet spirits, and in the almost unconscious aspirations of those silent hopers and thinkers who were realizing that their mother Church had a life and a history—grand and chivalrous as that of any local Church—in the long annals of the past. To them the “Christian Year” spoke as with the voice of the Church they loved so well. Part of its meaning and message they understood and realized ; the other part they understood not, or at least only fully appreciated after many days. What they understood and felt in their inmost soul was that revelation of the Church, its oneness and its continuity, which reminded each English churchman that he belonged to the mystical body of Christ by virtue of his membership with a local community that had been formed and founded by Apostolic men, if not by Apostles themselves, scarcely more, it may be, than a generation after the Lord had left the earth he came to save. This they realized ; this they recognized as the expression of their long-gathering heart persuasions ; this they soon carried out in life and practice. What they understood not was the deeper and more esoteric teaching which, as Dr. Newman rightly reminds us, is certainly to be recognized in the “Christian Year”—that which, for want of a better expression, we may call its sacramental teaching—the teaching that material phenomena are alike the types and instruments of real things unseen, and that the outward is often the appointed channel and vehicle of the inward and the divine. This doctrine, which certainly may be felt, if not traced in almost every deeper page of the sympathetic volume, was not appreciated at the time of which we are now speaking. Nay, it may be doubted whether it was consciously realized by the sweet singer himself. It was

a latent element in the spiritual influences of the time, but it was not brought out with any degree of distinctness, and under any practical aspects, till several, even many, years afterwards. A whole generation intervened between the date of the publication of the "Christian Year" and that of the very differently received treatise on Eucharistical Adoration.

Bearing this very certain truth in our minds, viz., that the germs of the great movement were already in many souls, even before the appearance of the "Christian Year," we may now proceed to trace its more distinct growth and development. Let it not be forgotten that Dr. Newman himself has always spoken of Keble as the true and primary author of the movement. And even this authorship must be limited to a first expression of what many of the old High Church party were beginning to feel already mingling with their higher hopes and aspirations.

We now pass over five or six years fruitful in development, and signal for the various and momentous changes, general and political, which they had borne with them to the Church and realm of England. The great Reform agitation had unsettled men's minds ; the bill for the suppression of several bishoprics in the Irish Church was passing Parliament ; the danger of still greater changes was by many deemed to be imminent ; fears, perhaps to a great degree exaggerated, and even unreasonable, as to attempts to liberalize the whole Church were everywhere in the air. If the Church was to be saved, it was now or never that a supreme effort was to be made. And it was made. A few earnest and ardent men, of whom Dr. Newman was the representative—the presbyter who in the first Tract says that he must speak—combined together, and in September, 1833, the "Tracts for the Times," "by members of the University of Oxford," announced that the effort had commenced. They at once announced the nature of their undertaking. It was no less than to stem the tide of liberalism, or, rather, to demonstrate, if the tide did overwhelm the establishment and deprive the Church of "its temporal honors and substance," that the English churchman had the apostolical descent and apostolical succession (both these expressions occur in the first Tract) whereon to rely, and that, resting on these,

it was now for him manfully to bear his part in the conflict. The main principle on which he was to act is so strangely antithetical to that on which the so-called churchman acts now, that it is worth while transcribing the words, if only to show how utterly untenable is the claim of the modern Ritualist to be a true descendant of the loyal and obedient men who were now speaking to the Church by these memorable papers. "Exalt our Holy Fathers the Bishops, as representatives of the Apostles, and the Angels of the Churches," was the advice of the author of the first Tract; "disobey and vilify them," is the counsel of the modern Ritualist, when they act or speak contrary to your own opinions and your own interpretation of the formularies of the Church.

II. Into the various questions and controversies which these powerful Tracts called forth it is not our object to enter in the present article, as we are concerned rather with the evolution of the germinal thoughts than with the mere controversial history. We may, however, here pause carefully to analyze what we know, from the leading author himself, to have been the three leading principles which were in the minds of the writers when the Tracts first made their appearance.

First, The principle of definite dogmatic teaching generally, as opposed to the liberal opinions which we learn (from a narrative published ten years afterwards) were everywhere current, and were beginning deeply to infect the Church itself. "Pamphlets," says Mr. Palmer in his Narrative (Lond., 1843), "were in wide circulation recommending the abolition of the creeds (at least in public worship), and especially urging the expulsion of the Athanasian Creed, the removal of all mention of the Blessed Trinity, of the doctrine of baptismal regeneration, of the practice of absolution. In fact, there was not a single stone of the sacred edifice of the Church which was not examined, shaken, undermined, by a meddling curiosity." It was to meet this serious state of things that the first principle was tacitly laid down as that which was to influence and dominate the whole. Liberalism could only be met by fixed and definite teaching; loose opinion by formulated truth and by dogma.

Secondly, Definite teaching, especially in reference to the

Church, her sacraments, and her ministers, as set forth by the great divines of the Church of England in the seventeenth century. This teaching, we are reminded in the opening sentences of the advertisement to the Tracts, was fast becoming obsolete with the majority of churchmen, and "are withdrawn from public view even by the more learned and orthodox few who still adhere to them." The Apostolic succession and the holy Catholic Church, we are reminded, were principles of action in the minds of our predecessors, which were fast passing out of sight and were becoming ignored even by those who ought to have been the first conscientiously to maintain them. The very principle of an establishment was judged to be fostering the evils of the time. "In proportion," says the writer of the advertisement, "as the maintenance of the Church has been secured by law, her ministers have been under the temptation of leaning on an arm of flesh instead of her own divinely-provided discipline, a temptation increased by political events and arrangements," which, at that time, were disturbing the minds of all conservative churchmen. Definite teaching on these points was felt to be imperatively needed; and this teaching, as Dr. Arnold long ago observed, became formulated in two statements, both of which may be rightly accepted by every loyal member of the Anglican Church, but both of which (let us not fail to observe) are liable to, and now suffering under, great exaggeration. The first statement is, to use the very words of the advertisement, that "sacraments and not preaching are the sources of the divine grace. The second is that the true efficacy of the sacraments depends on the rightfulness of the commission of those that administer them, or, again to adopt the precise terms of the advertisement, "the Apostolic succession"—the apostolic commission of the bishops, and under them of the presbyters of the Church.

The third principle was one on which we can dwell with much more satisfaction—a principle at first loyally maintained by these writers, a principle that served as a counterpoise to the two principles already mentioned, and maintained harmony and proportion in the whole teaching—fixed and unwavering opposition to the teaching of the Church of Rome. "No peace with Rome" was at first the watchword of the party. They

had received it from the great divines of the seventeenth century, and at first had fearlessly proclaimed it; but it was only in the earlier periods of the movement. In a few years it had become utterly obscured, and had given way to the sinister influences which from the very first had mingled with the Tractarian theology.

These influences it will be now necessary to specify, as they soon began seriously to affect the three principles which we have specified, and to give a unionistic tinge to a movement which, at first, was utterly free from and even opposed to any such contamination. The influences to which we allude were all essentially anti-Protestant. Without being definitely Romanistic, they were nevertheless thoroughly out of harmony with the Reformation. Their true representative was Hurrell Froude; and though he died comparatively soon after the movement had commenced, yet during the three years with which he was connected with it his influence made itself felt, especially on the mind of Dr. Newman, in a direction more and more divergent from the original line of principles and teaching. And that we are not mistaken in this view we may be certain from the interesting notices of this early example of the anti-Protestantism and Anglo-Romanism of the present day. "His opinions," says Dr. Newman, "arrested and *influenced* me, even when they did not gain my assent. He professed openly his admiration of the Church of Rome, and his hatred of the Reformers. He delighted in the notion of an hierarchical system, of sacerdotal power, and of full ecclesiastical liberty. He felt scorn of the maxim, 'The Bible, and the Bible only, is the religion of Protestants'; and he gloried in accepting Tradition as a main instrument of religious teaching. . . . He had a deep devotion to the Real Presence, in which he had a firm faith." ("Apologia pro Vita Sua," pp. 86, 87.) Such were some of the leading sentiments of one whose influence in the Oxford movement has never been sufficiently recognized, and who first gave the tinge that has now suffused the teaching of all the more advanced High Churchmen of the present time. He was essentially unionistic in all his views; "he made me look with admiration," says Dr. Newman, "to the Church of Rome, and in the same degree to dislike the Reformation. He

fixed deep in me the idea of devotion to the blessed Virgin, and he led me gradually to believe in the Real Presence." Here were the distinct germs of the two subsequent developments, assertion of priestly prerogatives and promotion of corporate reunion with the Churches of the East and the West, which at the present time are calling forth so much both of difficulty and anxiety. To fail to recognize this is to miss the close connection that exists between these elements of the movement of 1833 and the startling positions that are taken up by the extremist section of the High Church party at the present time. This real connection, as we shall soon more clearly see, is not by way of legitimate but of morbid development. The present principles of the extreme party are in no true sense a development of the great principles that marked the early stages of the Anglo-Catholic movement, but are simply the product of the morbid elements which, through the influence of Froude and a few less known men of similar principles, had contaminated the Oxford portion of the movement almost from the very beginning. We must, in fact, begin early to draw a line of distinction between the Oxford movement, as it locally developed itself in the "Tracts for the Times," and the same movement as it showed itself in its general working and its general effect on the Church at large. In the one case the morbid elements, after a few years, came to their natural and logical disclosure in Tract Ninety; in the other case, the great and broad principles, Church-realization and sober recognition of sacramental grace, both balanced by a calm but unwavering protest against the errors of the Church of Rome, long exercised a salutary influence, until at last vitiated to a considerable extent by the Ritualism which is only the present form of the morbid elements and corruptions already specified.

Without this discrimination the development of Anglo-Catholicism can never properly be understood or correctly appreciated.

III. The remaining history of the Oxford phase of the movement need not long delay us. Though it had early received the support and co-operation of Dr. Pusey, and though his great influence and deep learning did much to give to the Tracts both a position and a name, yet even he could not

countervail the essentially Romanistic tendencies which were year by year silently disclosing themselves. Like others, Dr. Pusey failed wholly to recognize the morbid and dangerous elements that were then actively at work. He actually, as Dr. Newman reminds us, afterwards defended the movement on the ground of its having passed into "stationariness," and yet, at the very time alluded to, we are assured by Dr. Newman that the advance Romeward had become patent and considerable. In the opening days of the year 1837 the controversy with the Romanists is alluded to as having overtaken the writers "as a summer-cloud ;" and certainly the simile was not inappropriate in regard of the manner in which the controversy was conducted. The defects and shortcomings of the Church of England were pointed out in a singularly frank and concessionary tone, while those of the Church of Rome, though admitted to be definite and positive, and even sanctioned by an anathema, were dealt with very tenderly, and even with a kind of latent sympathy, which, in spite of the occasional use of strong language and sharp expressions, seemed to disclose itself in the general tone and tenor of the Seventy-first Tract. Dr. Newman himself, about the same time, in a work which he published on the "Prophetic Office of the Church," uses very strong language against Rome ; but it was exactly strong language of that description which, in the minds of acute observers of human nature, suggests and awakens, if not suspicion, yet at any rate very grave anxiety. Whenever persons who avowedly have something in common with a system, whether in religion, politics, or aught else in which the minds of men are seriously divided, suddenly use strong expressions against it, and strongly denounce its more marked characteristics, we may be almost certain that a change is coming, and that the expressions are the utterances of old convictions that thus vainly hope to stay awhile the consciously felt current of conversion. That it was so in the case of Dr. Newman we know. With that truthful candor that marks every page of his attractive, and, let us not fail to add, seriously instructive, "Apologia," he tells us that though he spoke most strongly against Rome, he felt when he was doing so that he was bearing witness against a friend. Nay, he tells us that he was even under the

temptation of saying against Rome "as much as ever he could, in order to protect himself against the charge of Popery."

As it was then, so it is now. Our Ritualist newspapers in this country are full of denunciations of Rome. Invective of a very emphatic nature is applied to all recent developments. The attitude of the Roman Curia, the doctrine of the Immaculate Conception and of the Infallibility of the Pope are the continual subjects of a loud-mouthed abuse, which, we are quite willing to believe, is not intended consciously to deceive, though it certainly does awaken many serious misgivings. The mind fast gravitating to Roman Catholicism tries to relieve itself of its own apprehensions as to the accelerative force of its real predilections, thinks loudly, speaks loudly—but is almost made aware by every introspective glance that these loud cries and strong expressions are the sure prelude to what a well-known politician has called "the unreserved and bustling surrender." Roman controversialists know this well. As long as they hear of prayers to the Virgin being offered up in the private chapels of religious communities, of the sacrament of the Lord's Supper being administered in a secret manner, and of the reserved consecrated element being so borne to the sick, they smile at the hollow invective against some of the later features of a system that will soon be embraced as a whole; they hardly care to return railing for railing; they smile, they watch, and they wait.

There were also other signs which seemed to show very clearly which way the current, so far as indicated by the later Tracts, was steadily setting. The Tract on the Roman Breviary (No. 75), written by Dr. Newman, caused considerable uneasiness. The tone was confessedly anti-Romanistic, especially in reference to the devotions to the Virgin Mary, which, it contended, were all of a recent date; but it put forward this great manual of devotion under aspects which were by no means unattractive, and which, we remember well, induced many younger men to examine it and even to make use of it. Its attractive aspect was that it was presented to the religious student as embodying the devotional services of the primitive Church. Here he might find the earliest forms in which

the prayer and praise of the holy Catholic Church had embodied itself in the ages of faith that had immediately followed the times of the Apostles. Here he might find matter (to use the very words of the Tract) "for private devotions over and above what our Reformers have thought fit to adopt in our public services." And the result was that the suggestion was followed, and the younger and less balanced began to consider the Book of Common Prayer as only a jejune and emasculated service-book, a work of compromise and Protestant interpolations, that could not endure a moment's comparison with the great and venerable monument of Catholic devotion which was used and reverenced by the Church of Rome.

Another Tract, or rather short series of Tracts—for the subject was divided into four parts—on Religious Reserve appeared soon afterwards, and produced silently a great effect on many of the more earnest and inquiring. The object of the papers was to show that on several subjects Scripture maintained a sort of reserve in its inspired communications. There was much that was good and suggestive in these papers, especially in the concluding paper. There were, for example, some comments in reference to the doctrine of the Eternity of Divine Punishments, which, though brief, contained in them thoughts of a very salutary nature, and that might go far, if carefully expanded, to mitigate some of the difficulties now widely felt on this mysterious subject. Much confessedly there was that was true and wise; but, as we well remember, the effect on the minds of younger men was very far from what was probably either desired or contemplated. It seemed to indicate the need for some infallible guide, some authoritative interpreter of the real and hidden meaning of these dimly revealed truths. It pointed to a true *Ecclesia docens*, a Church that could speak with real authority, and guide the anxious and inquiring spirit to that true point of view which the conflicting utterances of Anglican pulpits only tended to make it more difficult ever really to reach. These Tracts never gained much notoriety, but the effect they produced was very great, and the restlessness and disquietude they caused in many of the more earnest minds of the day was traceable everywhere. The Bible was not the book it was represented to be, speaking to

all hearts, telling clearly its divine truths to all that had ears to hear—the Bible of Protestant Christendom to which all might confidently appeal, the blessed, fresh, and living Word that to the humble spirit was its own best and truest interpreter. It was rather the book of the Church, and could only be profitably read and truly understood under that specially accredited guidance. All this was much more felt than spoken at the time; but it *was* widely operative, and very largely contributed to the prevailing restlessness.

The end, so far as the “Tracts for the Times” was concerned, was fast approaching. Dr. Newman was pressed by those in authority to do all he could to stay the Romeward tendency among the younger men that was now showing itself, especially in the university from which the Tracts emanated. He readily did what he deemed to be best for the then prevailing distress, and put forth that principle which is still (if we read aright the last pamphlet of Canon Carter of Clewer) the creed of the more advanced of the High Church party, *viz.*, that the Thirty-nine Articles not only do not oppose Catholic teaching, but do not oppose Romanist doctrine, except in a partial manner, and where later developments had clearly adulterated the earlier statements of truth. The Articles, in fact, according to this Tract, were not what they were commonly considered to be—purely Protestant formulæries, of a comprehensive character in reference to Protestant differences, but very distinct in their opposition to Rome. They were rather documents, cleverly framed, that, whatever their *animus* might be, did, as far as their expressions went, permit a belief in much that was popularly judged to be clearly and unmistakably Roman Catholic.

This was the general tenor and thesis of the celebrated Tract Ninety. It was written in perfectly good faith, and sincerely intended to do what it tacitly professed to do—convince all who were doubting that they might remain in the Church of England, and yet, on very many subjects which had been obscured by the prejudices of a popular Protestantism, hold sentiments and opinions that were commonly considered to be distinctive of the Church of Rome. It was written almost avowedly for this object, but it was written by one who, un-

known to himself, was far on the road towards that destination from which, in perfectly good faith, he was seeking to discourage the advance of others. Hence, as might at once have been foreseen, the result was exactly the contrary. There was a false note throughout the whole. It was a Tract which, however good might have been the intentions of the writer, was simply not loyal to the Church of England. This was felt at once almost instinctively by the whole of the Church party. It was a Tract that had not only given up the third of the three fundamental positions to which we have already alluded—steady and persistent opposition to Rome—but had even minimized differences to an extent for which even the more advanced spirits of the movement were as yet wholly unprepared. The previous success of the Tractarian revival was due to the fact that its principles of distinct enunciation of doctrine and of sacramental efficacy were balanced by its sturdy maintenance of that uncompromising opposition to Rome which had ever honorably characterized the great divines of the seventeenth century. When this principle became weakened, and, as it was in Tract Ninety, in effect almost surrendered—when protest was only made against the more extreme and more novel teaching of the Church of Rome—when the points of agreement occupied the whole foreground, and points of difference had receded far into the background, then the true dangers of the recent development began to be distinctly revealed. Whatever it might have been originally, it had now become a movement that could only and consistently end in reunion with Rome.

All this was seen and felt after Tract Ninety lifted up the veil. The sequel we well remember—excitement and contention, and, after a short time, the loss to the Church of England of several of its more earnest and hitherto more devoted members.

This, however, was not wholly caused by the controversies and contentions that were called out by the appearance of Tract Ninety, and the consequent stopping of this remarkable series of papers, but by the fact, that had become more and more evident, that the *via media* theory had completely broken down. Dr. Newman had done his best to set forward, both

in his "Prophetical Office of the Church" and elsewhere, the principle that the Church of England holds the true mean between Romanism on one side and Dissent on the other, and had even attempted to construct a system out of the writings of the seventeenth-century divines which was to rescue the principle from the obvious charge of simply being negative. But it was hopeless. Men could not be brought to fix their deeper heart affections on a system that had at best only the merit of facing equally both ways. Something more definite was wanted, something that could be distinctly recognized, worked out, developed, and carried out in the realities of practice. A *via media* Church was, after all, rather a chilly abstraction.

The gravitation to Rome in the more advanced of the party thus became gradually more and more definite. They had been wiled away from the real and true theory of the Anglican Church, viz., that it was a living local branch of the Church Universal, that had its own great history, its own troubles, its own evil days under a foreign domination, and, in God's good time, its own reformation. This, the only true theory of the Church of England and of the Churches derived from it, had never been cordially accepted. The severance from the Church of Rome—not, as it really was, the separation in the early days of the reign of Queen Elizabeth of a comparatively small number of English Romanists from the local mother Church—was always borne painfully in the thoughts. The Reformation was ever felt to be something that needed excuse and justification. The openly expressed aversion of Froude to it was always a latent element in the whole movement, and was always an impediment to a frank and hearty recognition of the true historical position of the present Church of England. Hence the efforts to construct, as it were, a new basis for the Church, and to build up in the nineteenth century a spiritual edifice out of the elements of the seventeenth. When these efforts failed, there was scarcely any alternative left than secession to what was regarded by many as the original Church of the country. The break-down of the *via media* theory was thus plainly an element that helped to precipitate the ultimate catastrophe.

IV. We are now in a position to realize more distinctly the truth of the statement we have already made in an earlier por-

tion of this article, and on which a correct appreciation of the true character of the whole movement completely depends, viz., that there were morbid elements in it from the very first, which, in the case of Dr. Newman and others, worked themselves out to their natural and logical issues. There were, in fact, always two principles at work, which, as time went on, became more and more divergent. There was, on the one hand, the thoroughly loyal Church-of-Englandism of Hugh James Rose, Kebie (in his earlier days), Perceval, and others; and on the other hand, the distinctly counter-Reformation principles of Froude, to which the great moving spirit of the Tracts, Dr. Newman, as he himself tells us, became more and more distinctly attracted. It was Froude who made Dr. Newman first look with admiration to the Church of Rome, and in the same degree to dislike the Reformation. It was Froude who was the true author of that development which now, under the name of Ritualism, is carrying out all his principles and rapidly approaching the goal to which all such principles certainly and inevitably tend. These two schools of thought may be recognized in the Anglo-Catholic movement from the very beginning. Each worked to what in the sequel has proved a widely different development. The aim and object of the loyal High Church party, the old Church of England party, was a renewal and revival of doctrine and discipline, and especially of the sacramental principles, a return to the standard of Andrewes and Bull. Their ideal was a Church, in firm and salutary union with the State, thoroughly loyal to the Reformation, and always honorably marked by an unflinching and unwavering opposition to the Church of Rome. The aim and object of the other party was a return not only to early Catholic discipline and practice, but to a communion with the great Church of the West on the basis of a common heritage of doctrine and traditions, and with a reservation only on the subject of subordination to the successors of St. Peter. Their ideal was a Church wholly independent of the State, in union with the Churches of the East and the West, and itself the connecting bond between those long-sundered communities, local yet not insulated, free from papal domination, yet ever ready to assign a true spiritual primacy to the first Bishop of Christendom;

joyful and even proud to tender their homage to the living representative of the unity and perpetuity of the Church, and more than ready to secure an amnesty for the past by a repudiation and reversal of the Reformation.

Such were the two parties ; such the two schools of thought, the Anglican and the Anglo-Roman (as we may now call them), which were for a time mingled together in the earlier years of the Anglo-Catholic movement, and till a comparatively recent period have continued, to the great harm of the Church, in a sort of defensive alliance, on the ground that the advances of the common enemy, Scepticism and Infidelity, rendered such a form of alliance, or at least of mutual toleration, vital to the maintenance of revealed truth. That the Church has suffered greatly by this reluctance of the Anglican party to recognize and repudiate the utterly Romanizing developments of the Ritualist or Anglo-Roman party, may now be painfully recognized in England, and perhaps to some extent even in America. Matters would never have reached the present painful extremities that they plainly have reached in some few cases in the United States, if the Old High Church party had frankly declined any longer to shelter men who hated and abhorred the Reformation. And as for England, we do not hesitate to say that if ever disestablishment does overtake the Church of this country, it will be mainly due to the unchecked and even unreproved license with which the Anglo-Roman party have put forward their utterly un-English doctrines and practices. Tolerated disloyalty to the principles of the Reformation will hereafter be seen to be that which brought about the final catastrophe.

V. We may now conveniently pause to sum up the general results of the foregoing pages, and may briefly specify the general estimate which we seem led to form of the whole movement. And this estimate may be perhaps fairly expressed in the following statements :

First, The Anglo-Catholic movement of 1833 contained almost from the very beginning two schools of thought, widely different in their ultimate aims and aspirations, viz., the old historical High Church party, or what has been sometimes called in these pages the Anglican party, and a small but

subsequently active party, which afterwards developed, and may now be called the Anglo-Roman party.

Secondly, These two parties, though at first included in the same movement, soon showed their divergences; the great Anglican party being thoroughly loyal to the Reformation, and in full sympathy with the divines of the seventeenth century in their opposition to the Church of Rome; the small Anglo-Roman party, on the other hand, hating the Reformation, and so far gravitating to the Church of Rome as to contemplate at least the possibility of some form of corporate reunion. The one party always kept steadily in view the points of difference between the two Churches, especially when referred to the standard of the primitive Church, their watchword being, "It was not so from the beginning." The other party dwelt on the points of agreement, and on the essential unity of the Catholic Church, which, it was contended in the case of the Western Church, had been unjustifiably broken by the Reformation.

Thirdly, These divergences are now so serious and pronounced that it is becoming absolutely impossible for the two parties safely to co-operate, or even to remain in any form of alliance. For a churchman of the honorable school of Bull and of Hammond to accept a doctrine in reference to the Eucharist that is either transubstantiation or meaningless mystification, to connive at the reservation of the Sacrament, and even at administration in one kind, to tolerate in an evasively indirect form invocations of angels and saints, to press with all moral cogency the necessity of confession to a priest, to approve of live-long vows, and to plead for a renewal of communion with a Church where all these things are authoritatively established—for a Churchman of the great historical High Church party to acquiesce in, or even remotely tolerate, such a building up of the things we were permitted to destroy is utterly and absolutely impossible.

Fourthly, The real *differentia* between the parties is their estimate of the Reformation. In the years that have elapsed since the breaking up among the early leaders of the Tractarian movement, while the Anglican party has developed in the direction of what we have called Church-realization, and a

truer appreciation of sacramental grace, both strictly on Reformation principles, the Anglo-Roman party has acted in a widely different spirit. Instead of maintaining Reformation principles, it has devoted every energy to the reversal of them as forming the barrier and "mid-wall of partition" between the Church of their baptism and that Church with which they were seeking some form of corporate reunion. Hence the varied attacks on the Reformers that have disgraced many of the writings of the extreme party—attacks that increased in virulence and vulgarity until it became clear that the leaders of the party were beginning themselves to feel compromised by the coarseness of the invective, and probably felt it necessary privately to remonstrate. To speak of these men who, at any rate, poured out their blood for the cause they maintained, as unredeemed villains, and no better than the leaders in the great French Revolution, as was done by one unhappy writer a few years ago, was more than could be borne; public feeling was much aroused at the time, and permanently turned against all who could tolerate such indecency. If we were asked to name the one thing that operated in England more than another in turning the feeling of that country, and especially of the laity, against Ritualism, we should certainly point to these opprobrious utterances. We know many whose whole subsequent action was determined by the use of this language, and who resolved to hold no further communion with a party that did not at once cast such men out of her bosom. Of late this flagrant invective has been stopped; but as it is felt that it is only from fear of public opinion, and as what has been said has not only never been retracted, but has even been reaffirmed, there remains between the Anglo-Roman party and the general body of sober and constitutional churchmen a fixed chasm which never can be bridged over, a feud which is, and will ever remain, irreconcilable.

Lastly, we may now estimate at its true value the assertion that the Anglo-Roman or Ritualist party is a true development of the great Oxford movement of 1833; and we see at length to what it is reduced. Ritualism is a development from that movement, but not from its healthy and Anglican, but from its morbid and Romanistic, elements. The ultimate aim and end

of Ritualism is the restoration of the corporate union of Christendom, and so, by inevitable consequence, reunion in some form or other with the Church of Rome ; and that we are justified in making this statement is proved in the clearest way by the resolution of the recent meeting at Oxford to which we have already referred, a meeting composed of Roman Catholics as well as members of the English Church, and, we are grieved to own, presided over by a bishop of our own communion. And the resolution was this : " That the ultimate aim and solution of the Oxford movement of 1833 must be sought in the corporate union of Christendom." This is the deliberate utterance of Ritualism and Anglo-Romanism, but it neither is, nor ever was, the voice of Anglo-Catholicism ; it does not set forth the true, but the spurious, development, and as such, we are convinced, it will remain. When the great loyal and honorable Anglican party make such a resolution as that their own, then, and not till then, will we believe that Ritualism is the true and legitimate development of the great movement whose evolution and history we have been endeavoring to trace in the foregoing pages.

VI. Past and present have as yet entirely occupied our thoughts, but we can hardly close our article without some brief reference to the future. The question indeed seems to force itself upon us, If such be the history of the past, if this Anglo-Roman party is still tolerated by the great Anglican party as in a kind of connection with it, as a descendant, though an illegitimate one, from the same stock, what will be the ultimate fate of Anglo-Catholicism thus conditioned, and, we may certainly add, thus vitiated ?

The answer to this question, in reference to the Episcopal Church of America, we have not sufficient knowledge to venture to give even in the most general terms. From all, however, that has been communicated to us by those who hold office in that vigorous and healthily developing Church, we have no reason to think that the Anglo-Roman party is either of sufficient numerical importance or sufficient coherence to influence, in any perceptible degree, the future of the Anglican party, even if that party were disposed to bear with Ritualism little longer. Trouble might be caused to individual bishops

perhaps to a greater extent than may have been caused already ; but with the healthy forces of a young and vigorous Church bearing steadily against them, their numbers and influence will be certain to decline, until at length they will dwindle down to a petty faction, that may fairly be left outside of any estimates of the future. The Anglican party in the Episcopal Church of America will never have its great future more than infinitesimally affected by these reactionary particles, found only sparsely diffused in a sound, growing, and spreading branch of the now widely diffused Anglican Church.

In England, however, there seems reason for thinking that at first, at any rate, it will be different. In England the Anglo-Roman party, numerically small though it may be, has much more coherence and organization, and at present cannot be quietly ignored in any estimates of a future. If sheltered and protected by the Anglican party, it will develop and become year by year more reckless and aggressive. At last the end will come. The great historic High Church party, now regarded with interest and even a little latent favor by the country at large, will steadily decline in public esteem ; its growing sacerdotalism will antagonize, its impatience under the restraints involved and implied in the Royal Supremacy will become more and more avowed and patent, and the issue will be certain—disestablishment accompanied with disendowment, unsparing, radical, and thorough. If the Church is set free from the State in England, it will be only from one cause : that the Church will have become sacerdotally impatient of all State control ; and if so, the State will take especial care not to leave on the ground a powerful and wealthy community that might hereafter regain in influence, and even political importance, much more than it had lost.

If disestablishment comes to the English Church, it will be unmistakably thorough ; and come it will if the Anglican party do not very soon shake themselves free of the Anglo-Romanism that is now assuming attitudes which England has never very patiently tolerated, even in her darkest days, and which now would be repudiated in a manner and with an emphasis as sudden and as destructive as that which disestablished the Irish Church.

It is quite true that the national Church in England was never really stronger than it now is in the general affections of the country ; but it is also quite true that at the present time the impatience felt at the lawless and defiant position of the Anglo-Roman party is becoming almost irrepressible. When a responsible minister of the Crown has to say in the English House of Commons, as he did say not many weeks ago, that he "admitted most fully that it might be necessary for the State to arm the Church, or *to take power itself* to restrain lawlessness," we may be sure that matters are approaching extremities, and that if the Anglican party do not speedily disavow all connection with the counter-Reformation party, very serious troubles will soon come to the Church of England. At present there seems a willingness still to wait and see whether bishops will firmly do their duty, and whether the great party which has so long over-chivalrously protected extreme men because they hold in common with themselves fundamental truths, at a time when those truths are either explained away or minimized, will now at last leave them to the issues they have themselves wittingly provoked. For this there seems a disposition still to wait ; but the time is growing shorter, and the action of the Anglican party more and more a matter of serious anxiety.

For ourselves we believe that the worst is now over, and that a very different feeling, as to the coercion of extreme men, is now prevailing even in the upper stratum of the Church party, compared with what prevailed only a few months ago. If this healthy feeling should continue, the future of the Anglican party and of Anglo-Catholicism may be greater and more serviceable to the blessed cause of Evangelical truth in England than its past or its present. If those whose whole hearts and souls are really against the Reformation will only follow logically their principles, and go whither those principles lead them, instead of fruitlessly striving to make the Anglican Church other than it ever has been, or ever will be, then the work that Anglo-Catholicism may be enabled to do for Christ and his kingdom may well be such as to make us look forward with hopefulness and rejoicing. Let us remember that the very work for which the Oxford party was formed has not yet been

done. It was originally formed, as we have seen, at the beginning of this article, to check ultra-liberal opinions. Have they been checked? Are they really not stronger? Is it not the feeling of all earnest men that a great struggle is fast coming, that the conflict between the principle of belief and the principle of unbelief must increase and deepen—it may be until He comes?

In the storm and stress of this struggle Anglo-Catholicism may, from the very circumstances of the case, have to occupy a very prominent place. In saying this we do not forget the other great party to which the Church of the Reformation already owes so deep a debt of lasting gratitude. If the great Evangelical party had not quickened the Church there could have been no Oxford movement five-and-forty years ago. Nay, those who most influenced the movement were themselves originally of Evangelical principles, and owed perhaps all their future influence to that depth of personal religion, and that adoring love of a personal Redeemer, which they had attained to when under the teaching of a very different school of Christian thought. The great Evangelical party can never be overlooked in any estimate of the vicissitudes of the Church of the future. Its work, however, in the more immediate future would appear to be less clearly defined than that of Anglo-Catholicism. And for this reason, that in the conflict with infidelity, which is the conflict now hourly deepening around us, the historical principle, and, under proper limitations, the principle of Church authority—both of them principles with which the High Church party stands in more close affinity than the Evangelical party—must come sharply into prominence.

To the unbeliever there are ever two reasons that can be given for the faith that is in us. First, the subjective, viz., that the Bible-message, and especially the message of the New Testament, does verily, as Coleridge said, “find us,” answer our deepest questions, and effectually meet our deepest spiritual needs. But this would be insufficient without the complementary objective reason, that what is so felt and is so believed has been so felt and believed from the earliest days of the Gospel; that it has been formulated in creeds, professed by the Church in every age, borne aloft victorious through all contro-

versies, and rests securely, as an Apostle has said, on the up-bearing column and broad-based foundation of the Catholic Church.

This second, the historic reason, is that around which, it would seem, the controversy of the future will most earnestly be pressed. If the objective facts of Christianity can be shown to be true facts, then all else will follow. And here especially it is that Anglo-Catholicism is of paramount importance. It involves just that element of authority which reason, however enlightened, ever feels it needs, to become completely persuaded itself, and successfully to persuade others. It rests on ages of faith as well as on present argument; and with the majority of minds, especially with those who are, so to say, "standing at gaze," is probably more effective when it thus simply comes forward as the witness than when it takes up the ground of the reasoner and the controversialist. There are many signs at the present time that this libration to authority is increasing; and it is vital to the Protestant Church throughout the world that it should not fail to maintain its position as the primitive and apostolic witness to pure and unchanging truth. If not, Rome will effectually occupy the ground, and will secure to itself those many wearied spirits who now, exhausted by fruitless search, are seeking some final resting-place, some haven where they may cast anchor, and where, even though as yet they believe not fully, they may still wish for the day. The numbers of those who are thus silently joining the Church of Rome are large, and, we believe, year by year increasing.

We look, then, with deep interest, but also with deep anxiety, as to the next developments of the great movement which now, for nearly half a century, has exercised a potent influence throughout the whole Anglican Church. If it now return to its old characteristics, and if, while setting forth, as of old, definite doctrine and sacramental grace, it forget not that third principle, its Protestantism, its loyalty to the Reformation, and its unwavering opposition to the corrupted system of the Church of Rome, then the Anglo-Catholicism of the future may be that special influence by which it may please the great Captain of our Salvation to countervail the strangely mingled super-

stition and unbelief of these eventful times. Nor will it then be, as it has been in the past, an influence often countervailed by the rightful jealousy of the Evangelical party for the two great principles of the Reformation—an opened Bible and justifying faith. If it throw off the morbid elements that as yet are commingled with it, if it detach itself from the Anglo-Romanism which we have traced in this article, then the two great schools of thought—the Anglican and the Evangelical—may at last unite in the blessed work of confronting error and infidelity at home, and of bearing the blessed message of the everlasting Gospel throughout all the waiting nations of the heathen world.

These are great and high hopes, but they are not baseless. Already the best and purest spirits of both of the two great parties in the Church are showing some signs of the possibility of hereafter meeting on common ground, and of doing together a common work for their Lord, even while retaining the broad outlines of their religious distinctions. The Evangelical party has clearly advanced in many points towards a higher Church-realization and a fuller recognition of the blessings of sacramental grace. The High Church party, on the other hand, has begun to appreciate and to apply that warm, personal, and individualizing ministry of Christ crucified to each sin-laden soul, which has so long and so blessedly characterized the teaching of the best days of the Evangelical movement. It has also, we believe, at last begun to see in its true light, and is preparing to recoil from that perilous teaching that leaves no clearly defined line of demarcation between the Churches of the Anglican communion and the erring and innovating Church of Rome.

Let us humbly pray to God that this may be so, and that henceforth there may be a truer union in all those that love and that wait for the Lord's appearing, a deeper conviction and a more earnest faith. Let us pray that we may be all one in Christ, and may be permitted by him to share in the holiest work man can do here on earth—preparing for the Lord's kingdom, and hastening the coming of the ages of his everlasting reign.

C. J. GLOUCESTER AND BRISTOL.

## NATIONAL MORALITY.

THAT a nation in its public dealings should be guided by the same general principles of moral conduct by which an individual is or ought to be guided in his private conduct, is a truth which seems involved in the very conception of national being. The idea of a nation implies the existence of other nations, nations which, in the natural course of things, will have some kind of dealings with one another. And unless the whole world is to be a scene of unmixed havoc and bloodshed, those dealings must be guided by some moral rule. There must be a right and a wrong in the conduct of nations as well as in the conduct of individuals. But we may go further, and say that the rule of right and wrong which guides the conduct of nations must be the same as the rule of right and wrong which guides the conduct of individuals. To whatever source we may trace those laws of morality which most of us acknowledge, as a matter of fact we do acknowledge them. And we not only acknowledge them, but, as our minds are constituted, we cannot conceive any other laws. In the civilized world of modern Europe and America we take theological and political differences for granted ; but we assume a common morality. We need not for our present purpose dispute whether that morality is or is not eternal and unchanging. At first sight, the moral standard of one age often seems to differ widely from that of the age before and after it ; the moral standard of one civilized country seems to differ widely from that of some neighbouring country. But such differences are often more apparent than real. They are differences which are quite consistent with the acceptance of all the main principles of a common morality. One age, one

nation, is specially sensitive on some particular point of morality ; but it does not at all follow that less sensitive ages or nations deny all moral obligation on that point. For instance, what one age deems cruelty another age deems righteous severity ; but, though they differ in their definition of cruelty, they both admit that there is such a vice as cruelty, and that cruelty ought to be avoided. Or again, nations, like individuals, have different besetting sins : one vice will be common in one nation and another in another, though neither, when pressed, will maintain that the popular vice is other than a vice. Neither in an individual nor a nation does the practice of this or that vice prove any real difference of the moral standard. It merely proves that the common moral standard is nowhere fully acted up to, and that this man or this society of men is most apt to swerve from it on one point, while another man or society of men is most likely to swerve from it on another point.

We must reach quite another stage before we are entitled to say either that two men or two societies hold a different moral standard, or that one of them holds no moral standard at all. This can be said only when the question is no longer whether such or such acts come under the definition of a certain vice or virtue, but when it is maintained either that the vice is itself a virtue or that there is no difference between vice and virtue at all. Strict morality looks on duelling as murder ; but a society of duellists is not a society of Thugs. The duellist persuades himself that duelling is not murder ; the Thug holds that murder is itself a virtue. Looking at the matter in this way, we shall find that a general agreement as to the main principles of morality is far more widely spread than might seem at first sight. Our moral estimate of some acts differs from that of our grandfathers ; our grandsons will most likely in some points differ from us. But the difference is not likely to affect general principles ; it is more likely to be, as it has been hitherto, merely the question whether, when we have defined certain vices and virtues, this or that act does or does not come under the definition. Leaving aside then all philosophical questions as to the origin of moral sentiments, assuming the general moral sentiments which, as a matter of

fact, we have, however we came by them, we must admit that there is at present among civilized nations a general agreement as to what is right and wrong in the conduct of an individual man. We all roughly agree to hold that a man should not be cruel, unjust, selfish, false, treacherous, and so forth, even though we may sometimes differ on the question whether this or that act comes under the head of any of those vices. Now the present proposition is that whatever moral principles direct the conduct of individual men ought also to direct the conduct of the societies of men called nations. One difficulty meets us at the threshold ; but it is a difficulty which is merely apparent. It is plain that it is often right for a nation to do what it is, under all ordinary circumstances, wrong for an individual man to do. But the whole difference will be found to consist in the qualification about ordinary circumstances. The ordinary circumstances of a nation are what, in civilized countries, are very rare and extraordinary circumstances for an individual man. Take the great case of war—that is, of righting one's self by the strong hand. The right of so doing, under certain circumstances, cannot be reasonably denied either to the man or to the nation. But the circumstances which justify it come much more commonly in the life of a nation than they come in the life of a man. In most cases, if the nation is to right itself at all, it is only by the strong hand that it can do so, while an individual commonly has some better means of righting himself than by the strong hand. That is to say, in a dispute between nations there is not, as there commonly is in a dispute between individuals, a common superior who has both authority to decide the dispute and force to carry his decision into effect. If by any chance of time or place no such superior is forthcoming, if judge, magistrate, and policeman are none of them to be had, the man who suffers a wrong really finds himself in what is called a state of nature. If the law cannot help him, his natural right to help himself revives. The man who kills another in strict self-defence—that is, the man who wages a just war on his own behalf—is everywhere allowed to be guiltless. That is to say, the man, by a chance which in a civilized country is extraordinary, finds himself in what is the normal condition of a nation, and is allowed to act as a nation

acts. The familiar phrase of *International Law* has beyond doubt led to a certain amount of confusion. International law has its own undoubted range of usefulness ; but it is not law in the same sense in which the local law of any kingdom or commonwealth is law. For there is no common superior to enforce it. It is rather a code of rules for the good behaviour of nations, which, if all nations faithfully follow, the gain is great, but which has no means of enforcing itself upon any nation which refuses to follow it. When any nation sins against the international code, and thereby wrongs other nations, there is no international magistracy to appeal to. The injured nation must either put up with the wrong or else do itself justice by the strong hand. In Europe indeed something like an international magistracy does seem to be growing up in the shape of the five, now happily become the six, Great Powers. And no doubt, like any kind of check on mere force, a gathering of the Great Powers has its uses. But it lacks all the qualifications for a trustworthy magistracy. For a magistrate to have lawful authority, for him to be something more than an embodiment of force, he should either be chosen by those whom he rules or else appointed by some higher power which has lawful authority over both him and them. But the Great Powers have no claim to authority beyond their superiority in physical force. The six have received no commission from the other powers to administer justice among them, and modern international doctrines shut out the ancient notion of any common authority superior over all powers. Nor is there any reason to suppose that the decision of five or six greater powers will be always wiser or more righteous than the decision of five or six smaller powers. Experience seems to show that an assembly of Great Powers is not wholly exempt from the usual weaknesses of oligarchy ; it is not free from the temptation to value the claims of the great more highly than the rights of the small. Arbitration is free from these objections ; but a common fallacy runs through all schemes of the kind—all schemes of universal peace, universal arbitration, and the like. By all means let arbitration be substituted for war whenever contending nations can be got to submit to arbitration. But if one side either refuses to submit to arbitration or refuses to obey the decrees of the arbiter, the

last alternative again occurs ; the wrong must be either borne or redressed by force. As long as there is an admitted common superior, armed with the needful powers—that is to say, in all transactions among individuals and corporations within the same nation—this alternative never can occur. In any dispute between nations it always may occur.

Here then is the great difference between private and international transactions. In private transactions the appeal to force is so seldom needful or justifiable, that it practically does not come into consideration. Where there is a law and a magistrate to enforce it, no man has a right to take the law, as the phrase goes, into his own hands. In international transactions the appeal to force is to be avoided as long as it can be avoided ; but the cases in which it cannot be avoided come quite often enough to make it impossible to put it out of consideration. But there is no difference as to the moral standard in the two cases. The man and the nation alike ought to look on the appeal to force as something which ought not to be thought of till every other means has been tried in vain. The law pronounces that homicide is, in certain cases, justifiable ; but it very narrowly defines such cases. The presumption is that the killing is guilty—not necessarily murder, but either murder or manslaughter—unless some special circumstances can be shown which remove the act out of the class of guilty killing. And, first and foremost, the killer must show that he had no means of calling in the assistance of the law. This analogy may perhaps be carried out with regard to international dealings. Though, as we have seen, international law is not law in the same sense in which national law is, yet it has much in common with it. The object of both is the same, namely the hindering of wrong, though national law has the means, which international law has not, of carrying out its own decrees. For a nation to carry its complaints before an international court of arbitration is not exactly the same thing as for a private man to carry his complaint before the magistrate. For the never-failing difference comes in : the magistrate is an abiding common superior already armed with authority to decide the quarrel ; the international court of arbitration is not an abiding common superior ; it has no authority to decide the quarrel except

what is conferred on it for the time by the agreement of the contending parties to submit to its decisions. Still the two processes are closely analogous: one is an enforced, the other is a voluntary, substitution of a peaceful for a violent decision. Universal arbitration is a dream; it can come only when men have become so virtuous that neither individuals nor nations will have any thing to arbitrate about. But it would be a vast gain to civilization and humanity if it were understood that no nation should go to war without at least an attempt at arbitration. If the other party declines all arbitration, if it will hear of no arbiters or no terms of arbitration but such as are clearly unfair, if it refuses to abide by the decision of arbiters to whose judgment it has promised to submit, then the state of nature returns. The injured nation can redress its wrongs only by the sword; but the national conscience will be much clearer if it feels that, before the appeal was made to the sword, it had tried every means to settle the quarrel in a peaceful way, but had tried in vain.

It would then be a great advance in international relations if it could be thoroughly established that occasions which justify war on the part of a nation, though they come much more commonly, still strictly answer to those rarer cases which justify the use of force on the part of an individual. Let it be understood that in both cases force is the last resource, to be appealed to only when all other means have failed. Such a rule would certainly cut off a good many occasions of war. As it is, not a few people are quite ready to plunge two nations in war on grounds which between two individuals would be so far from being held to justify force that they would not be held to justify any action whatever. An individual may kill the man who puts him in real and immediate danger of his own life, if there is no means of bringing the force of the law to his help. He may appeal to the law in various ways if his person, his property, his reputation, is damaged—sometimes if it is only threatened. And there may be cases of less easily defined wrong which the law of the land cannot touch, but which may justify an appeal to public opinion on a greater or a smaller scale. But many people hold that it is not only allowable but creditable for two nations to go to war on grounds which, between individuals,

would not even justify an appeal to public opinion, sometimes on grounds which, between individuals, would not lead to any breach of personal friendship. No wrong has been done ; no wrong has been threatened ; there is not the slightest danger of any wrong within human eyesight ; there is not only no visible danger of wrong, but no visible danger of any clashing of interests ; all that is said is that it is possible that some interests may clash, or even that some wrong may be done, at some undefined future time. Any two nations or two individuals who have any dealings with one another at all, may be set down as natural enemies, if such a vague chance of mutual danger is held to justify enmity. But among individuals men do not appeal to force—they do not appeal to the law—they do not appeal to public opinion—they do not, if they have any sense, ever plunge into personal quarrels—about such distant and visionary dangers as these. But in international dealings not a few would deem such bugbears as these quite reason enough for deluging a continent with blood. That is to say, the moral standard which is applied to private dealings is not applied to national dealings. Men look on acts and passions as praiseworthy in dealings between two nations, which they do not look on as praiseworthy in dealings between two individuals. Envy, hatred, malice, and all uncharitableness are confessedly vices in the private dealings of man and man. They seem rather to be looked on as virtues in dealings between two nations. Jealousy and suspicion in their lowest form, the constant imputation of motives, the constant insinuation of insincerity against those which have given no sign of insincerity, a general rubbing up of every old sore, a general harping on every point which can possibly annoy, the meeting of the most friendly advances with words of public brag and bluster—all this would be thought base and dishonest—nay, it would be thought worse than base and dishonest, it would be thought ungentlemanly—in private life ; it is thought highly patriotic and highly clever if it is done towards some nation which is supposed to be a rival. Wicked men have in this way given themselves to sow strife between the two great bodies of English-speaking men on the two sides of the ocean. Wicked men have in the like sort given themselves to stir up strife between England and Germany, between

England and Russia. But we cannot suppose that any but a few of the very basest would deal in the same way in private life. For in private life dealings of this kind are looked on in their real light ; it is only in international dealings that an appeal to the worst passions of man is looked on as a mark of lofty and patriotic spirit.

Of course the most reckless fire-eater in a military club would not venture to put forth such doctrines in so many words. I believe that only one man in the United Kingdom of Great Britain and Ireland has been found openly to blurt out his regret that this year has not seen a war between England and Russia. Yet even the man who was sorry that there had been no "scrimmage" would hardly, if he were examined, dare to say that he sought war for its own sake, without any regard to the justice of the cause in which it was waged. If his own ideas of what constituted justice were not very clear, he would easily find ingenious men to put them into presentable shape. Nobody avowedly defends an unjust war ; every man maintains that the particular war which he approves of is just. If the grounds on which a particular war is defended are shown to be such as no one would look on as justifying a quarrel or even a coldness in private life, an ingenious advocate can easily appeal to the very distinctions which we have already drawn between the position of individuals and the position of nations. He can say, with perfect truth, that, as nations have no common superior, they do right to appeal to force in many cases in which among private men the appeal to force would be a crime. He can say, with perfect truth, that the same reason, the fact that nations are in a state of nature, makes it right and needful to use greater watchfulness against the possible doings and designs of our neighbours in international matters than we use in private matters. But all this in no way justifies the temper or the language of which we speak. Reasonable watchfulness is one thing ; constant suspicion and the constant offensive expression of that suspicion is another thing. It is perfectly reasonable that England should watch Russia and that Russia should watch England. It is not reasonable, and it is wicked, when, because it is possible that the two nations may have grounds of quarrel in generations to come, speakers and writers

in either country use language and stir up feelings which would not always be justifiable, even if the troops of the one nation were in full march upon the capital of the other.

We come back then to our original starting-point. The difference in position between an individual and a nation leads to certain differences in the rules of conduct of nations and of individuals. It leads, or ought to lead, to no difference in the principles of their conduct. Each alike, nation and individual, should be equally guided by justice, and by the same standard of justice. The difference is simply in the way in which redress has to be sought when the rules of justice are transgressed by another. A war between two nations may be perfectly just on the part of one of those nations—it may even be excusable on the part of both—in a case in which an appeal to force on the part of a private man would be a crime against society. But a war cannot be just in a case in which a private man would be held to have received no wrong at all. A man suffers no wrong, he is entitled to no redress, legal or social, because another man's estate comes nearer to his own than suits his fancy. He has just as little ground of complaint if the commercial success of some neighbour hinders his schemes of prosperity, or even directly lessens his profits. If any unfair or underhand step, even one which the law cannot punish, has been taken, that is another matter ; but we are supposing that there is nothing of the kind ; we assume that the loss or annoyance, real or imaginary, springs from no ill will or unworthy motive, but comes in the course of the natural ups and downs of human affairs. But exactly the same kind of thing in international affairs is treated in quite another way. In international affairs there may be no shadow of wrong, no danger of wrong ; perhaps all that can be said is that some other nation is increasing its territory or its commerce, and so has become, or may become, in some way dangerous to our interests. In many minds such a state of things justifies constant suspicion, constant hostile feeling, war on the first colourable pretext. The cry may be that the national interests are threatened ; it may be that the national honour is touched ; it may be that what is called the national *prestige* is likely to be lowered. When people talk about national *prestige*, we may fairly ask them to translate the outlandish word and to tell us

how to pronounce it. Old England and New England may alike refuse to listen either to arguments or to prophecies which cannot be put forth in the common English tongue of both.

*Prestige*, as far as we can guess from the etymology of the word, would seem to mean the tricks of a conjurer; it would seem to be something of the same class as *humbug* and *buncombe*—words which are not exactly classical English, but which certainly have a better right to that rank than *prestige*. If *prestige*, as an object of national policy, perhaps a subject of warfare, has any meaning at all, it would seem to mean that we are to do all we can to make other nations believe that we are greater and stronger than we really are, and to fight them—in order to keep up the delusion—if there seems any chance of the other nations finding out the truth. The tales of odd stratagems in warfare, some of which we are often tempted to disbelieve, are strictly cases in which tricks of *prestige* are played off upon the enemy. And in actual warfare they may be justifiable enough. But it is quite another thing for a nation to set up a false belief in its own strength as something to be enforced on other nations by force of arms. For *prestige* either means this or it means nothing at all. The truth is that it does mean nothing at all. Only two classes of people are likely to use the word. It is a favourite word with silly people who think it sounds fine, and with cunning people who know that their hearers will think that it sounds fine, and that they can thus trick their hearers into thinking that there is a meaning when there is none. No one would venture to bring the doctrine of *prestige* into the dealings of individuals. If I try to gain any point by trying to make my neighbour believe that I am richer or wiser or in any other greater than I am, I am clearly a scoundrel. And, in truth, men would hardly venture to talk of *prestige* in public affairs, if they attached any meaning, or thought that their hearers attached any meaning, to the word. The only meaning which the word can bear, if it bears any meaning at all, is one too profoundly immoral to be openly avowed. A man is not bound to show all his weak points; neither is a nation. But a policy of jugglery—and *prestige* means either that or nothing—a policy of constantly pretending to strong

points which do not exist, is immoral, and therefore dishonourable, on the part of either man or nation.

I say immoral, and therefore dishonourable. For I cannot admit for either man or nation any standard of honour varying from the law of right, or even distinct from the law of right. Whatever is right is honourable; that is, honour is its fitting reward. Whatever is wrong is dishonourable; that is, dishonour is its fitting punishment. A battle won in an unjust cause, a diplomatic triumph won in an unjust cause, is not honourable, but dishonourable, to those who win them. This general proposition must, at least as regards warfare, be qualified by the various degrees of responsibility which attach to those who engage in warfare. A war which is unjust, and therefore dishonourable to the king or minister who orders it, may yet afford scope for conduct which is in the highest degree honourable on the part of particular men or bodies of men. A conscript who is dragged to fight in a cause which he knows nothing about, a cause which, so far as he knows any thing about it, he may possibly condemn, can hardly be blamed for the injustice of the cause in which he fights, while the accidents of war may give him the opportunity of doing many right, and therefore honourable, actions. But the mercenary who, by his own confession, sells himself for the gold of a tyrant to help in bringing victims under the tyrant's yoke, is clearly even more guilty than the tyrant himself. For the tyrant may act under some measure of self-delusion, while the mercenary, whose avarice cannot resist the temptation of the tyrant's splendid offers, sins above all men with his eyes open. Between the often perfectly blameless conscript and this last lowest depth of shame, several various degrees of responsibility may easily be conceived. But whenever a war is waged unjustly, those who are responsible for the injustice are acting wrongly and therefore dishonourably; and the mere fact of success in an evil cause takes away nothing, in those to whom the responsibility can be fairly brought home, from the wrong and the shame of the evil. Any standard of honour which measures honour by mere success, or which can in any other way ever prescribe conduct which is condemned by the law of right, is a standard not of true but of false honour.<sup>1</sup>

<sup>1</sup> I have discussed these points more fully in an article on "The Law of Honour" in the *Fortnightly Review*, December, 1876.

Now, there is no doubt that there are such false standards of honour abroad, standards of honour which are altogether distinct from the law of right. And it is clear that such false standards go far to confuse men's moral notions, even more in public than in private affairs. The "honour" of a nation, as that phrase is used in many mouths, seems to have nothing whatever to do with the rules of right dealing. It not uncommonly implies the killing of men, as far as one can see, for the sake of killing, without any thought of the right and wrong of the cause in which they are killed. In the late war between Russia and the Turk, the cry was often heard, "Now that the honour of both sides has been satisfied, let them do this and that, make peace or the like." In this use of the word, "honour" simply means killing; when it is said that the honour of both sides has been satisfied, what is meant is that each side has killed a good many of the other side. Because they have had this supposed satisfaction, they may, it is thought, be both of them more inclined to make peace. What this has to do with honour, in any worthy sense, it is impossible to see. It is the language of professional murderers; and yet it has been often heard, both this year and last, from the mouths of persons who are undoubtedly respectable in their private conduct. The nearest approach to an abstract meaning that can be put on such a formula is that, when a good many on both sides have been killed, it proves that both sides can fight well, and that to fight well is honourable to both sides. The answer is that to fight well is honourable only when the fighting is done in a good cause. To fight well in a bad cause is not honourable. It may, as we have seen, under certain circumstances, be honourable in particular men; it cannot be honourable in a nation as such. Mere physical courage, apart from the use to which it is put, is no more honourable—that is, it is no more entitled to moral approbation—than mere physical strength. Both, like any other gift of mind or body, may be honourable or otherwise, according to the use to which they are put. Or, again, as we hear of an honourable war, so we hear of an honourable peace. That generally means a peace by which the nation to which it is said to be honourable gains a good deal. The gain may consist in the acquisition of territory by sheer force without any claim of right, perhaps against the

wishes, and contrary to the interests, of the people of the territory which is acquired. Here there can be no honour, but dishonour, for the transaction is unjust. Honour, in short, in all this class of phrases, simply means success, whether success take the form of killing or any other. But success is only honourable in a moral sense when the cause in which the success is won is a just cause. Any rule of honour by which success, simply as success, is deemed honourable, is contrary to the rule of right, and is therefore immoral.

In what has just been said it is of course not meant to deny that, if the only object was to stop the war, without regard to the objects of the war, such appeals as those which have just been spoken of had a good ground to go upon. Whenever either men or nations begin to fight, there is always a tendency to forget the objects which are at stake, and to concentrate the interest upon the fight itself. Men and nations alike are more likely to listen to proposals of peace, when each side has both shown its own prowess and has felt the prowess of the other. Such a time is therefore well chosen for the mediation of neutral nations which simply wish to bring the war to an end. But this is simply a calculation of prudence. It has nothing whatever to do with the "honour" of either side in the moral aspect which we are now discussing.

The case of Russian and Turk, which was just before put, is one which well illustrates this false line of thought. It is possible to maintain that there was no honour to lose on either side, but on no view could there be honour to lose on both sides. Each side, we are told, had, at a certain stage of the war, satisfied its honour ; yet it is absolutely certain that on one side or the other there could be no honour. The Russian war of 1877 was not an indifferent act ; it was not one of those wars in which, though there must be a right side and a wrong, there is still so much to be said on both sides that it is hard to say which way the right and wrong lies. It was, on the part of Russia, either a frightful national crime or else an act of almost unparalleled national virtue. It can be justified on one ground, and on one ground only. If the Christian nations of South-eastern Europe were ground down under the cruel bondage of alien taskmasters, if they had no power to help themselves, if

the other nations of Christian Europe refused to help them, if the wrong had risen to such a pitch as to be utterly intolerable, if it was such that any nation which had the power was justified in stepping in to redress it, while Russia, specially bound to the sufferers by the ties of race and creed, was called on to step in before all other powers—if the war was entered into on such grounds as these—and, on the part of the Russian people, it undoubtedly was entered into on such grounds—then no war that ever was waged was more truly honourable, because none was ever waged in a purer and more righteous cause. The Russian had his honour to satisfy, and his honour could be satisfied in one way only, namely by the discharge of the duty which he had undertaken—that is, the deliverance of his brethren. But, on this view, the Turk had no honour to satisfy. His whole position was unrighteous, and therefore dishonourable. He might show physical courage, and his physical courage might win the same purely physical admiration as the kindred courage of a bulldog. But courage shown in an unrighteous cause, the courage of men who were simply fighting for the right of oppression, could not be entitled to moral approbation; it therefore was not honourable. Of course, even on this showing, the distinction which has been already drawn must be drawn again. The deepest conviction of the righteousness of the Russian and the unrighteousness of the Turkish cause does not all imply the condemnation of each particular Turk. This or that Turk might be guided by thoroughly high motives; he might make displays of courage in the higher and truly honourable sense; he might do worthy and generous actions of other kinds. No conduct was ever more truly honourable than that of those Turkish officers who tried to lessen the horrors of the massacres of 1876. But the Turk as a Turk, the Turks as a body or gang, simply fought for the right—at least for the power—to do evil. Their courage therefore had nothing honourable about it, any more than the courage which the murderer or burglar may show in withstanding the policeman. The Russian, in short, fought that he might save his brethren from the foul and bloody passions of the Turk. The Turk fought to keep for himself full power of gratifying those foul and bloody passions. On this

showing the honour is all on one side : the Russian had honour to satisfy ; the Turk had none.

But let us, for argument's sake or for dramatic effect, turn the tables. The war was, on the part of Russia, either one of the noblest of crusades or else one of the most unprovoked aggressions recorded in history. The Turk had certainly not done to Russia any of those direct wrongs which are commonly held to justify war. Russia had, so to speak, no personal ground for the war. If the action of Russia cannot be justified on the ground that her warfare was waged to deliver her brethren from intolerable oppression, it cannot be justified on any other ground. On any other showing, the Russian march into Turkish territory was naked aggression on an unoffending neighbour. In such warfare—again with the limitations before drawn—there could be nothing honourable, because there would be nothing just. On such a showing, the honour was on the side of the Turk, and of the side of the Turk only. Alike from the Russian and from the Turkish side, the cry which arose about the middle of the war—"Each side has now vindicated its honour ; let them now make peace"—was, when thus put, simple nonsense. Neither side had vindicated its honour, because neither side had done what, from its own point of view, was its duty. The talk about honour being vindicated, because each side had fought well and had inflicted some defeats on the other side, implied a standard of honour which had nothing whatever to do with any standard of duty, a standard of honour which made honour to consist in simple killing.

So again, while the same war between Russia and the Turk was going on, a still more astounding proof was given of the utter incapacity of some minds to apply the laws of right and wrong to public affairs. From the point of view which looks on the rule of the Turk as simply a foul tyranny to be swept as soon as may be from the earth, it is hardly possible to conceive a greater crime than that of an Englishman or other civilized man selling himself to the Turk's military or naval service. Such an one sells himself, for sheer lucre of gain, to press the yoke of the oppressor on the necks of men longing to be free. He goes, sold body and soul, to do any work of blood and treachery which his barbarian master may appoint. If it

be allowed that the worst form of oppression is a crime, and that those who give it their voluntary support are criminals, it might be argued that the public morals of Europe must be at a low ebb when men who have sunk to this depth of infamy are received into the highest English society and are allowed to meet the ministers of Christian powers as their diplomatic equals. Of course those who do not see the wickedness of supporting oppression are not likely to see the special wickedness of those who let themselves out for hire to support it. Such a state of mind is strange ; but still stranger, from every point of view, was the doctrine which appeared during the war of last year in the letter of a special correspondent of the *Times*. Appealing to those who altogether condemned the taking of service with the Turk, he professed that he could not understand why it should be thought that those who had taken it had taken it merely for the sake of gain. He further thought that even those who disapproved of Englishmen taking service with the Turk ought still, as Englishmen, to rejoice whenever their countrymen "distinguished themselves" in the Turk's service. There surely never was a more instructive example of incapacity to understand an adversary's position ; the adversary would say that there never was a more instructive example of incapacity to understand the simplest moral truths. The correspondent failed to see that, if those who entered the service of the Turk did not enter it out of love of gain, they must have entered it, if not out of sheer love for the service of the Turk, at all events in utter indifference to what the service of the Turk—that is, the forcible maintenance of the rule of the Turk—necessarily implied. He failed to see that, from the point of view of his adversaries, the motives suggested by way of defence were still worse than the motive suggested by way of accusation. He failed to see that to those adversaries his words could convey no meaning, except that he thought it creditable for Englishmen, English officers, that they should be thought to have undertaken to enforce the rule of murder, rape, and robbery, out of sheer love for the rule of murder, rape, and robbery. He was arguing with men whose answer would be that he who fights for the Turk, and does not do it for money, must do it from motives yet worse than the

love of money. For in their eyes the work of the Turk is the work of the devil, and the man who does the devil's work for money is surely one degree less guilty than the man who does the devil's work out of sheer love for it. Even stranger was the argument that those who thus thought should rejoice when their countrymen distinguished themselves in the Turk's service. That is, he called on men to rejoice because their countrymen were successfully doing the work of the devil. Englishmen were to rejoice because other Englishmen had done something to strengthen the dominion of evil. For what was in such a case meant by a man "distinguishing himself" was that he was doing all the mischief in his power, that he was advancing the evil cause at the expense of the good. The result, if there were any, of the acts by which he distinguished himself was to kill a good many men who were fighting in a righteous cause, and to give to men who were fighting in an unrighteous cause a wider scope for working their foul and bloody will. To such an extent had the false standard of honour blinded some minds that mere military "distinction"—in plain words, successful killing—had come to be looked as something in which all should rejoice, even those who deemed that the distinction was won—that is, that the killing was done—in the vilest of causes. Those who kept their moral sense of course refused to rejoice. They looked on the deeds of the English traitors to Christendom simply as they would look on any other evil deeds of their countrymen in a foreign land. They looked at the "distinctions" won by the hirelings of the Turk exactly as they would look on the "distinctions" which an Englishman who had joined a band of Sicilian brigands might gain by a gallant resistance to the *Carabinieri*. The cause would certainly not be worse; the display of skill and courage might be equal. But then the criminals in the other case are "gallant officers," "honourable gentlemen," and a long string of names of the same class. But "gallantry" and "honour" are, as long experience shows, not inconsistent with the doing of the foulest crimes, public and private. Only, by the strangest reasoning of all, in one notorious case, it seems to be held that a lesser private crime has been wiped out by a greater public crime.

All this shows an imperfect conception of national morality. The false standard of so-called honour is put in the place of the true standard of duty. But the standard even of false honour is a worthy one compared with the standard which we have of late seen most commonly set up, the base standard of interest. The standard of honour has about it a certain feeble reflexion of the standard of right ; in a community which had no standard of action at all, where every man did as was right in his own eyes, if such a community could not rise to the conception of the standard of right, it would be a distinct advance to raise them to a conception of the standard of honour. But the doctrine of interest hardly needs to be preached anywhere. The teaching that right, and even honour, are to go for nothing in national dealings, the teaching that we are to seek only our own interest, never mind how much wrong is thereby inflicted on others, can hardly be preached as a novelty. It comes very much to this, that a nation is to act in public matters as the worst men in the nation act in private matters. Happily a nation is commonly better than its worst men, and the *evilspel* of interest has evidently found that it had a dangerous adversary in the gospel of right. It is not for nothing that the vials of wrath of a certain section of the English press are poured out, day after day and week after week, upon all who venture to think that a crime does not become a virtue if it is held to promote British interests. The impassioned fanatic on the one hand, the heavy sneerer on the other, would not be leagued together against the unhappy being called a "philanthropist," if they, the professed haters of mankind, did not find that the lovers of mankind are still a considerable body. Day after day, week after week, has the doctrine been dinned into English ears that it matters not with what criminals we ally ourselves, it matters not to what crimes we give our countenance—the next stage would be that it does not matter what crimes we do with our own hands—provided that what are called "British interests" are in any way advanced by those crimes. No one but the very basest of men would dare to avow that he acted on such principles in common life. No one would dare to avow that it was the rule of his own personal conduct that he cared not what crimes were done, what sufferings were borne by

other men, provided the general result conduced to his own interest. If any man acts on such principles, common shame hinders him from publicly proclaiming them. For such a man would be generally shunned ; people would be afraid to put themselves in the way of one whose interest it might be to do them an ill turn at any moment. Corporate bodies are said, because of their divided responsibility, to be less scrupulous than individuals ; but we cannot conceive any corporate body avowing that it acted on principles of such base and unmitigated selfishness. It is only when the affairs of nations are concerned that it is openly avowed that the laws of morality are to be wholly cast aside, and that any thing may be connived at, perhaps that any thing may be done, provided only the national interests may gain by it. We are, in short, again brought back to the old story ; obvious as may seem the rule that we should apply to the dealings of nations the same rules of right which we apply to the dealings of individuals, as a fact men do not so apply them. There is a famous despatch which all who have followed the events of the last three years have by heart, which puts the doctrine of indifference to wrong in a clearer form than any other. In that despatch it was declared to be a matter of indifference whether 10,000 or 20,000 Bulgarians were murdered, because English interests demanded the support of the power—a power allowed to be addicted to “fearful excesses”—by whom the murders were wrought, and because any change which might remove or weaken the murdering power “would be most detrimental to ourselves.” Here is the *evilspel* in its fulness. A civilized nation upholds a murderous power with its eyes open ; the nature of its ally, his tendency to “fearful excesses,” is fully admitted ; but his alliance is still to be maintained, because it is thought to be for the civilized nation’s interest. One of the old prophets might have said in the like case, “Shouldest thou help the ungodly, and love them that hate the Lord?” The teaching of the new lights is different. That tells us that, be our ally what he may, be his victims 10,000 or 20,000, our knowledge of his nature “cannot be a sufficient reason for abandoning a policy which is the only one that can be followed with due regard to our own interest.” Those who think otherwise are “shallow politicians or persons

who have allowed their feelings of revolted humanity to make them forget the capital interests involved in the question."<sup>1</sup>

Here the most profound public immorality to which the heart of man can reach is unblushingly avowed. The last faint tribute which vice pays to virtue is cast aside; interest is declared to be the only rule; any amount of crime is to be countenanced and upheld, if only we profit by it; humanity is spoken of only as a mere troublesome intruder which is to be shown its place and taught not to meddle with the divine law of interest. A principle is laid down which would justify any cruelty, any treachery, any break of international law, if we only believe that the crime is conducive to our interest. The preacher of this doctrine has no right to condemn the foulest deeds that are written in history, if only those who did them had reasons to believe that the interests of their own kingdom or commonwealth would be promoted by them. The moral creed of the votaries of interest has perhaps never been so fully carried out in practice as it was by the Order of the Assassins.

Now, if the author of this famous despatch stood by himself, he might be pointed at as a strange and ugly moral phænomenon. The unhappy thing is that he does not stand by himself, that he is no worse than thousands of others, that his doctrines are fully accepted by a large section, we may without doubt say the larger section, both of the English press and of what is called English "society." It is the fashionable thing, it is thought fine, it is thought clever, to avow the most thorough contempt for all scruples grounded on the law of right and wrong, and unblushingly to avow interest as the only law of public action. Now, in all nations, in all ages, and under all forms of government, there has been a tendency this way. And the vice has, like other vices, found out the way to veil itself under an attractive shape. As long as men do not sin for their own personal advantage, they are apt to think that they cannot be sinning. The idea that they are acting on behalf of their country invests the crime with a halo of patriotism. One set of men practically infer that their own country must be in the right in every thing; another set are ready to maintain that, right or wrong, the

<sup>1</sup> Despatch of Sir Henry Elliot to Lord Derby. Blue Book, Turkey, No. 1, 1877, p. 197.

interests of the country are the sole rule. In all times and places, men have, wittingly or unwittingly, acted on these principles; but there have been few times and places where they have been so impudently avowed as principles of action as we have seen them within the last two years. The speech in Thucydides where Kleōn argues against mercy to the Mitylenaian captives goes a long way on the road of political immorality; but it is quite outshone by the English despatch. To slaughter, or to propose to slaughter, several thousand men in cold blood, and calmly to justify the act as a terror-striking example to others, is certainly revolting to humanity. But Kleōn defended it directly on the ground that it would promote Athenian interests, and the new doctrine expressly teaches that, when the sovereign voice of interest speaks, the murmurs of revolted humanity are not to be listened to. And there are several circumstances which make the argument of Kleōn decidedly the less monstrous of the two. The persons for whose slaughter Kleōn pleaded had actually dealt a great blow, not to some distant and shadowy interests of Athens, but to her real power in the midst of a dangerous war. There was even some shadow of reason for looking on them as criminals brought for trial before a competent court. In truth, if instead of the lives of thousands being at stake, it had been one or two lives only—if, in short, the course which Kleōn counselled had been an execution instead of a massacre—the deed, if it could not be justified, might easily have been palliated. To put to death, or to justify the proposal for putting to death, a crowd of prisoners whom there was some pretence for looking on as rebels, revolting as it was to humanity, was certainly less revolting than the profession of callous indifference on the part of England whether ten thousand or twenty thousand people were murdered, not because they had done or planned any kind of mischief towards England, not because their slaughter in any way directly profited England, but because it was fancied that any interference with the power which murdered them might tend to the advantage of another power, a power which again had not done or planned any mischief towards England, but which it was feared might do or plan some such mischief at some unknown time.

These last words may bring us to another point in which certain doctrines as to national conduct which widely prevail seem to differ altogether from what is commonly looked on as just and fair in private dealings. We have referred to the way in which it is thought becoming to cherish every kind of bitter feeling towards this or that nation, even though no actual wrong has been suffered, because it is thought possible that some danger may come from that nation some time or other. So many things happen unexpectedly that is well to be prepared against any chance ; that is, it is well always to be in a reasonable state of general preparation. No nation ought to neglect its defences, any more than a man ought to go to bed without locking his door. But it is one thing for a nation to keep up its defences ; it is another thing for a nation ostentatiously to blow a trumpet to say that it is strengthening its defences expressly against some other nation which has done it no wrong, which shows no sign of any thought of doing it wrong. The two nations themselves, each in its own country, may be so placed that neither of these has the slightest provocation to hurt the other, while each has every motive to cultivate the good-will of the other. Each most likely, like all the powers of the world when they have a chance, is an advancing, often a conquering, power. But neither of these two has advanced or conquered at the expense of the other ; neither has any temptation to advance or conquer at the expense of the other. But each may have distant possessions which do not come anywhere near each other, but which, as both powers are fond of advancing and conquering, may perhaps meet some generations hence. Now one would have thought that in such a case the wise thing was for the two nations to do every thing in their power to keep up friendly feelings towards one another, in order that, if their frontiers ever should meet, the meeting may be a meeting, not of enemies, but of friends. The rules of morality certainly dictate such a course ; one would have thought that the rules of prudence dictated the same. But the doctrine of interest, as now received, seems to teach that, in such a case, we are to do all that we can to provoke and insult the power which may, generations hence, become our neighbour. It is not only to be suspected and guarded against ; it is to be hated and con-

demned beforehand on the strength of the mischief which it may do some time. Though it may not have shown the slightest wish to become our enemy or our rival, it is to be driven to become our rival and our enemy even against its will. The vilest system of oppression is to be countenanced and upheld, if it is thought that by upholding it we may thwart some design or other of this power of which we are determined to make an enemy at all hazard. This, and nothing else, seems to be just now the practical teaching doctrine of interest. This kind of national conduct, so we are now told, is that which is likely to pay among other nations ; this is the way to enlarge our *prestige*, to maintain our honour, and, it would seem, to fill our pockets into the bargain. In the view of such clear and undoubted interests as these, we are taught to uphold the power of the oppressor, to hold it for a matter of indifference, perhaps for a matter for merriment, when he massacres 10,000 or 20,000 of the oppressed. Let them perish ; let us do nothing to save them, nothing to avenge them. Let us back up the murdering power all the same ; if we fail to back it up, if we save a single victim from its fangs, something very terrible, we know not exactly what, may happen, we know not exactly where, in the time of our descendants, we know not exactly how many generations off.

Now so many terrible things have happened in our own time and in earlier times, that we may fairly risk the prediction that something very terrible will happen within a limit of time and space so wide as that which is all that we can give in this matter. The question is, whether we can so arrange the history of the world beforehand as to stop the terrible thing from happening, or at least to move it, if it must happen, to some time and place which may not affect our own *prestige*, our own honour, or our own interest. As a rule, schemes for settling future history come to very little. And the schemes of diplomatists come to even less than other schemes. These subtle men who can spy dangers at the distance of thousands of miles or of years, can hardly ever see what is going on under their own noses. As a rule, somebody does see what is going on, and he is laughed at for his pains. But the diplomatists never see any thing. When a great war is just going to break out, they commonly

tell us that the prospect of things is unusually peaceful. They laughed at the notion of united Italy ; they laughed at the notion of united Germany. But Germany and Italy are united. Three years ago they looked on the revolt of Herzegovina as a thing which could easily be put down, and of which nothing great could come. There were those who knew better, and who were laughed at for knowing better. Two years back the scheme of making Bulgaria into a tributary principality was solemnly declared to be "out of the range of practical politics." Since then the range of practical politics, to put the thing delicately, has somehow been widened. Even last year diplomats ruled it as an eleventh commandment, that the dominions of the Turk should be nowhere cut short. A little time back at Berlin they were busy breaking their own law at every frontier. It still raises mirth to hint that a Greek prince may possibly sit on the throne of the New Rome. The mirth may be borne, when we remember how short a time it is since the same kind of mirth was awakened by the thought of a Savoyard prince sitting on the throne of the Old Rome.

There is certainly something very strange in this union between a capacity for seeing things afar and an incapacity for seeing things near at hand. It makes us inclined to doubt whether these very distant objects are seen at all, whether they exist at all. It may be that the British refusal to accept the Berlin memorandum staved off the difficulties and complications which might arise from a Russian occupation of Karakorum in the twenty-first century. It is more certain that this policy, which may be so superhumanly wise at a distance, has lost England the chance which lay immediately before her of taking the highest place in Europe as the protector of oppressed nations. With the greatest ease in the world, England might have won to herself the attachment of all the nations of South-eastern Europe. To ordinary understandings this would seem to be the course dictated alike by considerations of honour and by considerations of interest. In fact, things look as if honesty were the best policy after all. At least it would seem more politic to make the greatest possible number of friends, rather than, according to the new doctrine of interest, to make the greatest possible number of enemies.

All this leads to the conclusion that the conception of

patriotism, as generally understood in our day, needs to be greatly altered. Arnold said a wise thing when he spoke of "exclusive patriotism" as "a prejudice of barbarism." And, as many people seem to understand patriotism, it is a barbarous prejudice indeed. It is something which is largely mixed up with the worship of the false gods, *prestige*, honour, and interest, but which seems to have very little to do with true views of national morality. It is a kind of patriotism which consists more in shouting than in any thing else, but its shouts seem to be commonly called forth with very little regard to the right or wrong of the thing shouted about. Or rather it seems to be thought unpatriotic to bring in the notion of right and wrong at all. A battle, we will say, is won, or a piece of territory is acquired, whether as the result of the battle, as the result of a secret treaty, or in any other way. Under pain of being pointed at as unpatriotic, we are bound to shout for the victory or the new piece of territory. To ask whether either victory or territory is won in a good cause is unpatriotic. The theory is that which we have already come across, either that our own country sets the standard of right and wrong and that the fact that our own country has done a thing of itself proves it to be right, or else that right and wrong do not matter at all when our own country is concerned. This again is the doctrine of interest, only clothed, no longer in a diplomatic shape, but in one more jovial and popular. And this kind of talk is generally coupled with a profound conviction that the nation with which it is thought fine to pick a quarrel is sunk in the lowest depths of wickedness, that all its actions, purposes, motives, must be inherently evil. It is indeed unpatriotic to think otherwise. Yet one would have thought that the same rule must apply equally to every nation all round, and that if nation A is justified in taking its own acts as the standard of right, nation B is at least excusable in doing the same. But no, it would be unpatriotic to think that—we will not say any other nation, but the particular nation with which we have taken it into our heads to quarrel—can have any excuse for any thing that it does or thinks. This is the patriotism of toasts and songs, the patriotism of disturbers of public meetings and of blustering ministers at public dinners, the patriotism which thinks that a grave argument whether a certain line

of policy is right or wrong is best answered by a cry for the song of "Rule Britannia." All this shows the feeling in a grotesque outward shape ; but the outward grotesqueness is the index of very real and very dangerous doctrines within. It is the practical belief of large classes in every country that it is unpatriotic to believe that our own country can be wrong in any case. It seems further to be their practical belief that, even before the country is committed to any course, it is unpatriotic to argue against that course which makes it easiest to brag about "Rule Britannia," or whatever may answer to "Rule Britannia" in the national song-book. Every patriotic Englishman—every patriotic man of any other nation—will hope that his country is able to fight three campaigns if there be good cause for fighting them. But he will, at the same time, hope that his country will never fight even a single campaign without a good cause. But the latter half of the doctrine has in many ears an unpatriotic sound ; at any rate, it does not sound so patriotic as the former half. When the question is, "Shall we go to war or not?" a large class of minds seems to discern a certain patriotic sound about the affirmative, a certain unpatriotic sound about the negative answer. The negative answer implies at least the possibility either that the nation might be unable to do what it undertakes, or that it might be wrong in undertaking it. This last extreme supposition, the belief that the nation to which we ourselves belong can possibly be in the wrong, is of course altogether unpatriotic. And it is curious to see how partisan writers come to identify the nation with their own party, and at how great a distance they can smell the lack of patriotism. There was an amusing instance of this in a late number of one of the chief English periodicals. The writer is maintaining the curious paradox that there is an analogy between those Englishmen who just now protested against the Turk's oppression of Eastern Europe and those Englishmen who, seventy years back, did not protest against the elder Buonaparte's oppression of Western Europe. The passage stands thus :

"In every controversy to assume that this country is in the wrong, to attribute base motives, to predict disastrous consequences, such have been the persistent 'notes' of Liberal criticism ever since the Conservative Government

came into power. By steady perseverance in this way of looking at things, a habit of mind is generated in which the censure originally directed against the administration is in the end fastened upon the country. Until this carping temper has ceased to prevail in Liberal policy, it is idle to hope that the masses of the English people, among whom, whatever may be the casual appearances to the contrary, national pride is still strong, will be drawn into the current of Liberalism.”<sup>1</sup>

The Liberal party in England, it need not be said, has done nothing of the kind, at least not in the sense that is implied. “Base motives” may have been attributed where they were obvious, where, as in the open preaching of the doctrine of interest, they were avowed. As for what, in the grand style, is called “predicting disastrous consequences,” those who happen to have sharper eyes than the diplomatists can afford to share the fate of Micaiah and Kalchas. Nor has the English Liberal party assumed that in every controversy their own country is in the wrong; what they did was to try to keep their country from getting into the wrong. By the light of nature we might be inclined to think that so to do was the highest effort of patriotism. But it must be allowed that, according to the doctrine of interest, it is an effort which is very likely not to profit him who makes it. For nations, like individuals, are apt to like flattery better than good advice. The point which is really instructive in the passage quoted is that it is assumed as something beyond controversy that no wise, seemingly no patriotic, man will run the risk of giving his country good advice. It is assumed that it is an unpardonable offence, one at which “national pride” will naturally revolt, to think that one’s own country can be in the wrong, or, at all events, to act as if we thought so. “National pride” must be an extremely silly feeling if it cannot endure the doctrine that the nation is not infallible. We do not look on a man as wise who directs his own actions and his estimate of them by such a rule as this. We do not think a man a wise or sincere friend who directs his conduct towards his friends, or even his parents, by such a rule. Why, then, should it be the right thing with regard to the common parent, our country?

It is singular again how thoroughly the word “patriotism” has come to mean something which has to do with the foreign

<sup>1</sup> *Nineteenth Century*, August, 1877, p. 327.

rather than the domestic affairs of a nation. It may be doubted whether a man would, in the present temper of a large English party, get any credit for patriotism by struggling for internal reforms or liberties of any kind. In the case of a civil war the claim might perhaps be allowed ; for civil war has so much of likeness to foreign affairs that it involves the element of fighting. But it may really be doubted whether a man who, by getting a bill through Parliament, or by any other means, should confer some real benefit on the country of a purely peaceful kind would be thought to be patriotic at all. It is not meant that he would fail to receive honour ; but the honour which he would receive would be of another kind. Large bodies of men would never think of applying the name "patriot" to him. His patriotism, if actually asserted, would perhaps not be denied ; but there are many into whose minds it would never come to assert it. Such actions as those just supposed are not the kind of actions which a vast class of people think of when they speak of patriotism. Could such a case happen as that of England having to choose between Indian dominion and trial by jury, it is certain that a great many people would choose Indian dominion. Other nations before now have made the same kind of choice almost directly. They have sold the internal freedom of their country for its supposed external glory. Patriotism, in the received view, must be something which has to do with other nations, something which has to do with making a show in the face of other nations ; it is well if it does not mean defying, crowing over, insulting, alienating, all other nations. It is something which has more to do with the bigness of a nation than with its greatness, perhaps not even with its actual bigness, but with the *prestige* or make-belief of its bigness. For there can be no true greatness either of a man or of a nation where the rule of right is forgotten. But in the rush after mere bigness or the *prestige* of bigness the rule of right is very easily forgotten indeed.

We are here again, on the point of patriotism, as on every other, brought back to our grand primary doctrine. There is in the concerns of nations, as there is in the concerns of individuals, a law of right, and this law of right is the same, though its sanctions may be somewhat different, both in the concerns of

nations and in the concerns of individuals. The true patriot is the man who seeks the welfare of his country. But the true patriot holds that there is no welfare worthy of the name apart from right dealing. He will be zealous for the dignity, the glory, even for the interest, of his country ; but he will be zealous for them only so far as dignity, glory, and interest are compatible with right. Or rather, he will make no such reservation, because he will hold that no true dignity, no true glory, no true interest, can be found anywhere but in the path of right. He will wish to see his country hold a high and honourable place among other nations ; but he will hold that such a high and honourable place is not won by brag and strut and bluster in the face of other nations. He will hold that it is not won by abject flattery of tyrants, by base slander of their victims, by making promises to struggling nations only to lure them to destruction. When an administration follows such a policy as this, the patriot "censures"—it is a very mild word—that administration ; if the nation seems in danger of following the policy of such an administration, he warns the nation of its danger ; if the nation hopelessly commits itself to such a policy, he must take the last step of "censuring" the nation itself. He cannot, even though national pride be drawn into some other current, bring himself to call evil good and good evil. He will warn and protest as long as warning and protestation are of the slightest avail ; if the "current" of "national pride" be too strong, he can only wait and hope and pray till the torrent shall have passed by and spent itself.

One other sign of the prevailing laxity with regard to national morality is the way in which a large class of people find it impossible to understand the moral indignation which, in minds which have kept their moral sense, is awakened by great public crimes. They seem to expect us to discuss great questions of national right and wrong in as calm a tone as if they were questions of ordinary internal politics, where the question really is only a question of means to an end. They cannot bear to hear deeds of wrong and the doers of deeds of wrong spoken of by their right names. We ought to speak of them gently and civilly, as the noble lords and honourable gentlemen which they conventionally are. No doubt in the

professed indignation which is aroused whenever a man calls a spade a spade in public affairs, there is a great deal of mere pretence put on for party purposes ; but there is also a good deal of genuine feeling. People confound two totally different classes of debates. To take present English questions, A may take one side and B another about such questions as disestablishment, female suffrage, extension of the franchise, and the like, without there being the slightest ground for breach of the strictest friendship or for either thinking worse of the other than he did before. No doubt any of these subjects may be attacked or defended on grounds or in a spirit which may make us think worse of this or that disputant ; but there is no reason why they should be so treated. Of course these questions, and all questions, have a moral side. It is a man's moral duty to take that side which he conscientiously holds to be right, unless he is in the happy or unhappy state of thinking the arguments on the two sides so equally balanced that he cannot conscientiously take either side. But a man may act with as good a conscience on one side as on the other. All these questions are strictly matters of argument ; there is something to be said on both sides : one mind may honestly think the arguments for the attack the stronger ; the other may as honestly think the same of the arguments for the defence. Nothing but outrageous party spirit will think a man morally the worse for taking either side in questions like these. And in greater questions, say the great struggle of the seventeenth century, while we all take one side or the other, every fair-minded person will allow that there was enough to be said for the side which he does not take to account for thoroughly honest men taking that side. Men are kingsmen or commonwealthsmen, aristocrats or democrats, as much from natural temper, education, and habit as from intellectual conviction. We might wish that it were otherwise ; but it always will be so. A may attack an institution which B deems so sacred and venerable that he would give his life in its defence ; B may defend an institution which A deems so mischievous that he would give his life for its destruction. And yet the motives of both A and B may be equally pure. But it is impossible to conceive any pure motive for upholding the foulest of tyrannies, for treading under foot the liberties of struggling nations, for swearing to our neighbour and disap-

pointing him of the just hopes which we have ourselves kindled. Deeds like these speak for themselves. There is no good motive from which they can spring. Indeed there is no need to search into motives ; those who do them, those who applaud them, openly confess, or rather boast, that they are all done in the service of the false god interest. We cannot discuss deeds like these as we can discuss ordinary differences of political opinion. In such discussion we have passed out of the range of questions of opinion into the range of moral right and wrong. To speak gently of such crimes, to call them by any thing but their right names, shows an imperfect sense of national morality. The men who so speak would often exercise a perfectly right judgement in a case of private crime, and would not shrink from giving the wrong-doer his proper name. But they fail to understand that there are such things as public crimes ; they fail to understand that the betrayers and murderers of nations are more truly, more deeply, guilty than the betrayers and murderers of particular men. The actors themselves may very likely not perceive the guilt of their crimes ; but this does not lessen the guilt of the crimes in themselves, even if we allow it to be pleaded as a ground for mercy towards the criminal. What many of us fail to understand is that acts such as these are as distinctly moral offences as any crimes which the municipal law punishes, that they are not mistakes or errors or differences of opinion, but crimes, crimes which the municipal law fails to punish simply because they are crimes on a greater scale than ordinary crimes. To soften down one's language in speaking of such men and their doings, to speak of them as we might speak of differences about a budget or a reform bill, is in truth tampering with evil ; it is in some sort partaking of the evil which we shrink from honestly denouncing as evil. Other generations were less mealy-mouthed. The prophets of Israel, the orators of Athens and Rome, the greatest orator of England a hundred years ago, did not shrink from denouncing public crimes in the plainest language. Their words would sound shocking indeed in the ears of those who profess a lofty indignation when even the betrayers of nations and upholders of tyrants are spoken of by their true names. To be sure those who profess such lofty indignation against the champions of freedom and right hardly carry out their own rule ; they are com-

monly ready with language just as strong against those whom they condemn.

In short, evil, especially falsehood, has just now a distinct advantage. A man in power may lie as often as it suits his convenience, and neither shame nor loss of power awaits him. But fearful is the offence of the honest man who shall venture to say in plain words that the lie is a lie. All this paltering with moral evil must have a bad effect on the general moral standard of a people; it is of a piece with that other form of received immorality of speech by which a prince is always to be conventionally endowed with the virtues which he least possesses. Every conventionality, every formality, which tends to weaken the sense of truth and right has a demoralizing effect; and none has a more demoralizing effect than that which confounds mere differences of opinion or judgement with moral crimes the guilt of which is shared by him who palliates them. An honourable adversary, whether in debate or in warfare, is entitled to every consideration, to every courtesy. The point is that tyrants and those who uphold tyrants, those who flatter the oppressor and slander and betray his victims, are not honourable adversaries, but criminals, criminals to be denounced, as righteous men of old, under every law and with every tongue, denounced the evil deeds and the evil men of their own times.

In a word, dealings between nation and nation will never be thoroughly wholesome or thoroughly just till it is acknowledged, practically as well as in words, that nations are to deal with nations according to the same moral laws which are held to bind each man in his dealings with other men. That truth is as yet but feebly grasped; it will never be thoroughly carried out in practice till the idols *prestige* and interest are broken down as if by the stroke of Jehu or Mahmoud. Nor can a healthy standard of morality in public affairs be ever attained as long as conventionality demands that crimes by which thousands of human beings are calmly consigned to the yoke of unutterable bondage shall be dealt with and spoken of as gently as we willingly speak of mere differences of policy, where one side may be defended with as good a conscience as the other.

EDWARD A. FREEMAN.

## THE PRESENT RIGHTS AND DUTIES OF SCIENCE.

THE great truth underlying the subject of this paper is that every thing human has its ethical aspect. A stone, a brickbat, an ounce of dynamite, or an ounce of gold, may in itself be absolutely unconnected with the domain of morals ; but so soon as it comes into human hands questions of right and duty cluster round it. If this is true of merely material things, still more is it true of operations of mind. Every thought, every imagination, every conclusion, has direct relations with the moral nature as well as with the intellect. It becomes us, then, in viewing the materials of our modern civilization and social systems, to regard them from this point of view, and not to allow any great power to be abroad in the world without questioning it as to its duties and ascertaining what are its rights. It is in this ethical aspect that I desire for a little to regard the developments of modern science.

Science is a term of wide application, and may include any of those subjects of human thought in which facts are systematically arranged and referred to definite general principles. I propose here to take a narrower range, and to restrict myself to those sciences which relate to matter and force—the physical and biological sciences. Not that, with one of our modern schools of thought, I regard these as including all science worthy of the name, but because these have in our times attained a growth so vast, and have come to bulk so largely in the eyes of men as agencies for good or evil.

The rapid advance of precise knowledge and of inductive results with reference to matter and the energy which actuates it, and the myriad applications of this knowledge to the arts and

utilities of life, constitute indeed one of the main features of our time—one by which it is markedly distinguished from bygone ages, and one by which it will probably be characterized in the estimates formed of it by ages to come.

The cultivators of science have also come to be a most important class, even in numbers, and in influence greatly more important ; and while on the one hand they appear as patient, self-denying plodders, toiling for the good of their fellows, on the other they become aggressive and troublesome when they attempt too rudely to explode our old ideas or to change our old ways.

What duties, then, does society owe to science and its cultivators, and what reciprocal rights devolve on them ? Or, to put it in the converse way, What are the rights of science in relation to society, and what its duties to society in return ?

With reference to its *rights*, science has fared very differently in different periods. In the dawn of civilization we can see in Chaldea and in Egypt bodies of learned men sheltering their scientific pursuits under the garb of religion, and cultivating, as a means of securing consideration, no little charlatanry in the form of astrology and divination. Yet these adventitious claims were sometimes dangerous as well as profitable. If the magi of Babylon had not mixed up their science with the forecasting of events and the interpretations of dreams, Nebuchadnezzar would not have condemned them to be slain and their houses made a dunghill. It is not to be concealed that similar baseless pretensions may still produce conflicts between science and other powers in society.

In the Græco-Roman period, with a few exceptions, among which Aristotle stands pre-eminent, science wandered from the safe paths of accurate investigation into those of speculative philosophy, prematurely grasping at the ultimate explanations of things ; and so lost credit and cultivated opposition and contempt. We shall see that still the same tendencies produce like results.

The Arabian science, one-sided and unequal, and never penetrating the mass of the people, owed whatever it possessed of good to the inheritance of the practical culture of the East as distinguished from the speculations of Greece. Short-lived and leaving only a few brilliant results, it has at one time been unfairly overlooked and at another unduly exalted.

In the Middle Ages, amidst the expiring agonies of an old world and the birth of a new, the dread realities of life and death pressed too heavily on men's minds to permit much scientific activity, and caused them to cling to civil and ecclesiastical despots subversive of free thought and fatal to scientific progress. Yet in those dark ages were laid many foundations of good things to come.

With the emergence of the modern world out of the chaos of the Middle Age, came the revival of learning and the birth of modern science—from the first a healthy babe, cradled by the ancient and modern literature and the reformed religions; at first walking hand in hand with them, but latterly showing a tendency to use its young vigor to smite down these its old nurses and associates, and to claim the whole field of humanity for itself. It is this young Samson, revelling in his early strength, who presents himself to us now, that we may consider what rights he should enjoy, what duties he should perform.

The right of investigation may now be said to be freely granted to modern science. The denunciations of the impiety of prying into the secrets of nature, and the *jeux d'esprit* once current as to the pursuits of naturalists, are now quoted only to be laughed at, or are confined to such naughty things as vivisection or to the too ostentatious proclamation of our affinity with imagined poor relations like apes and gorillas. Further, the ordinary man of business is well aware that he is indebted to science for most of the conveniences and accommodations that surround him at home, facilitate his movements when abroad, and enable him to communicate with distant friends, as well as for a thousand safeguards that are thrown around his health and his property. He may know little of the facts or principles involved in the transmission of his message across the Atlantic, but he is quite sure that somebody must understand them, and that this somebody, whoever he is, must be a useful and respectable person, and should be encouraged rather than otherwise. Besides, he has a dim notion that there are men still working at problems yet unsolved which may some day minister still farther to safety and comfort; and though he would scarcely feel called upon to contribute to the maintenance of such persons, since after all they may prove to be but dreamers, it would be wrong to hinder them.

Nay, modern society is disposed to go much farther than this. Most of the great civilized countries of the world are now familiar with scientific commissions of one kind or another. We have, for example, National and State geological surveys, which are supposed to be specially intended to develop the mineral resources of the districts which they explore, or perhaps to reflect some glory upon the community which supports them, for its liberal patronage of science. The geological survey, once established, becomes a very general scientific survey, less perhaps for the advantage of economic industries, except indirectly, than had been intended, but greatly for the advancement of pure science.

Occasionally, when some insect or vegetable plague makes its ravages very severely felt, the ridicule which usually attaches to fly-catching and bug-hunting, or the gathering of obscure fungi, gives place to some temporary regard for these occupations, and the entomologist or botanist is subsidized that he may discover the cause of the trouble. The despised man of science thus has his revenge, and he usually takes it. Again, places are often given in our educational institutions to eminent specialists, not because of their ascertained aptitude for teaching, but because of the reputation which they have gained, and which is reflected on the institution with which they may become connected. Thus while education sometimes loses, science gains ; but in this way men are often misplaced, and good workers are converted into indifferent professors.

Latterly these imperfect methods have been somewhat decried, and there has been some agitation as to the endowment of scientific research for its own sake—a somewhat difficult matter, for not only has the public to be persuaded to spend its money on what is apparently unprofitable, but the right men have to be found, and care has to be taken that under the influence of generous diet they do not become fat and lazy.

One of the best and safest means of giving such support is undoubtedly that of furnishing facilities for study in great libraries, museums, and laboratories, and in providing means for the publication of results, as is now done in connection with universities and learned societies, and in such great institutions as the Smithsonian and the institutes founded by the liberality

of Mr. Peabody and other benefactors. Another method, also very useful, is that of giving grants for special research, as is now done by the British Government through the Royal Society, and by the British Association. When we consider how little opposition is now made to any kind of scientific research, and how much scientific men are aided by the public, we have perhaps little to complain of in regard to the rights of science. Yet when we reflect on what science has done, how many promising fields of investigation are yet uncultivated, how fruitful even small advances may sometimes be in practical results, it can scarcely be doubted that our niggardly and precarious support of science delays the progress of civilization, and may postpone to future times benefits which we ourselves might enjoy.

Another aspect of this subject must not be overlooked—its educational bearing. Science has a right to a large share in the education of the young. In this it is undoubtedly securing a constantly increasing recognition, but it has not yet attained to its proper position, whether as to quantity or quality. Much that passes for education in science fails because it is not scientific education. The study of text-books, however good—and most of them are very bad ; the cramming of dry elements for examinations—these things are not learning science, and they are themselves, with reference to what we know of mind and its functions, most unscientific. Science has, in short, a right to be taught according to its own proper methods, even although educators should insist on teaching languages and literature as heretofore, in the most unscientific methods possible.

To succeed in this, the teacher must himself know his subject well, and he must have the gift of presenting it acceptably, and the art of presenting it in the most natural order ; and the student must learn, because he hungers and thirsts to know, not because he is driven. Such study of science is valuable, not merely as a means of adding to knowledge. It is one of the best and most practical kinds of training for any future pursuit. So soon as science can be generally taught in this way, it will be the strongest aid and stimulus to other branches of learning, and we shall hear no more of the conflicting claims of science and literature in our educational work.

Some of our most advanced scientific educators hold that in

education science should precede literature, and certainly knowledge and thought necessarily precede expression. It must be borne in mind, however, that all young people begin life with certain natural science studies of their own, and if the educator, instead of crushing all the native inbred tendency to observe and compare, and forcing his pupil to attend to dry abstractions, were first to systematize and render scientific the stores of fact his pupils already have, and then to make these the basis of further progress, learning would become easy and pleasant ; but alas ! where are the teachers to be found competent to take this first step in rational education ? They cannot be found till education in science shall have taken a higher place in our systems of instruction.

At present many difficulties oppose this desirable consummation. Nearly all our educators are still wedded to the abstract scholastic methods of education still in use. Even our science text-books are generally tainted with the same bad leaven. It is difficult to procure apparatus and collections for schools, and still more difficult to secure public appreciation of the work. All scientific educators throughout the world are daily struggling with these disadvantages, and they will in due time be removed. When this shall be, and when science shall have taken its true place as an educator, a new era will have dawned upon the world, in the added force given to intellect, and in the more full and satisfactory solution of all the hard questions which beset society.

Scientific education necessarily presents two aspects : one, that which relates to the training of scientific workers ; the other, that which concerns elementary and popular teaching for all. The first is necessary to secure the existence and progress and applications of science, but it must be confined to a comparatively small number. The second represents the diffusion of the benefits of science among the mass of the people ; and this also is essential, both to give the public support and countenance which the scientific worker requires, and to leaven society itself with the influence of scientific training. And here I would denounce that old and evil fallacy, that a little science is dangerous. We may, it is true, have too little to be of much service, but every scientific acquisition is intrinsically worth something.

The humblest object-lesson taught in a village school—on a butterfly, a flower, or a crystal—if well and truly taught, is a great and permanent gain to the learners—one that may prove the foundation of vast intellectual wealth in the future. But every thing depends on the little being good of its kind. Where a little only can be taught it should be limited to few things, and these thoroughly and clearly understood. Then will even a little learning manifestly bring the mind into the presence of the Creator's plans, and correspondingly elevate and ennable it. It is a wonderful thing to observe how the mind of a child craves for insight into the wonders around it, and how it can grasp the comprehension of great laws of the universe, and how it is beyond measure expanded thereby. I fear I may seem too sanguine in this matter, but I have a very deep conviction that few even of our most advanced thinkers have any just conception of the educational value of science, with reference not merely to learning, but to all our political, social, and even religious interests.

The *duties* of science to the world are correlative with its rights. Its cultivators owe it to themselves, their subject, and society that they investigate, apply, and teach; and in considering these duties here, we shall necessarily have to examine from another point of view some portions of the ground already traversed.

Scientific investigation, I need not say, is pursued in our time with marvellous assiduity and success. Besides the few eminent men who are known throughout the world as original discoverers, there are thousands of more obscure workers, unknown, or visible only in very limited circles, who are steadily pursuing their special lines of study, and penetrating farther and farther into the unknown.

The work of scientific research as now pursued is laborious and self-denying. Whether with the telescope, microscope, or spectroscope, with sounding-line and dredge, with hammer or dissecting knife, with crucible, tests and balance, the labor of the scientific worker is long, arduous and wearying, and but for the fascination of such studies it would be matter of astonishment that so many, unaided by public funds, press forward in this career—impelled, it may be, by mere enthusiasm or by desire of fame, or eager to make practical applications.

To some it may seem strange that so much remains to be done, and that the boundaries of nature in every direction have not long ago been reached. Those who think thus have no adequate conception of the practical infinity of the universe. Our knowledge of the atomic constitution of matter, of the motions of its molecules, of their relation to energy in various forms, of the conservation and correlation of forces, of many of the recondite phenomena of life, of the ancient history of the earth, is but of yesterday, and is in all respects so imperfect that all our advances in these and many other directions only seem to open up new vistas of discovery leading to new and perhaps more startling revelations. These new paths of research present new difficulties to be overcome, new positions to be attacked with more powerful and advanced artillery. The cry of science is thus still onward, and its goal of yesterday will ever be its starting-point to-morrow.

One evil attendant on this is the cultivation of specialties to the neglect of general views. Our small army of explorers, spreading out as it advances into the vast regions before it, becomes divided into little bands, and eventually almost every individual seems to be isolated and pursuing a path of his own without concert with his fellows. Hence arises a narrowing of men's minds, a setting up of small objects as of primary importance, a tendency to extreme views, a want of sympathy and harmony. In the old time, when each man could play many parts, it was different. If there was less depth in certain specialties, there was more breadth. Time and growth will restore what of good we have lost in this respect. A good foundation of general education in science will give the younger men now entering on the stage a broader base, and subjects once thought distinct are tending to coalesce. This is markedly the case with the great natural forces of light, heat, and electricity. It occurs also in the domain of organization among animals and plants, broad resemblances being observed where before only differences were discerned. The spectroscope has united optics and chemistry with one another and with astronomy. Geology has welded together in the past history of the earth a great number of the physical sciences. Very recently a text-book has been prepared to teach these relationships under

the name of physiography—a name which may eventually become well known and highly important. It is undoubtedly the duty of science, while pursuing actively the work of research along individual lines, to study practically this consolidation of the sciences.

And here it becomes science to confess with much humility how far it falls short of the full comprehension of nature, and to abstain conscientiously from premature conclusions. The rapid progress of discovery in recent times only makes more plain to us the fact that the extension of our knowledge implies the extension of our ignorance, that everywhere the progress of knowledge leads us to insoluble mysteries. It would be easy to furnish illustrations from every branch of science; but geology and biology are very fertile in them. For example, no fact is better established than that, within times geologically recent, we have had so great changes of climate that at one time the plants of warm temperate latitudes flourished in Spitzbergen and Greenland, and that at another the snows and ice of the Arctic have invaded temperate regions. Contemporaneously with these great vicissitudes of climate, so great changes of the level of sea and land occurred in the northern hemisphere, that our continents were at one time submerged several thousands of feet, and at another were higher and broader than they are at present. Yet geology and astronomy concur in assuring us that the poles of the earth have remained unchanged, and neither has yet given us satisfactory causes for all of the phenomena observed.

Again, we seem to have traced the phenomena of life in their ultimate manifestations to certain complex compounds of the albuminous group. But these are not necessarily endowed with life. They may be either dead or living, and in the latter state they present phenomena of motion and change and growth, which must depend either on some inscrutable rearrangement of their molecules or on some peculiar force which we cannot isolate, or perhaps on both causes. Further, these protoplasmic substances are themselves products of previously existing living beings, and we do not know any way in which they can be produced out of ordinary dead matter. An eminent physiologist, who perhaps as much as any other has labored to evade, if

he could not solve, this problem, has admitted that "the present state of knowledge furnishes us with no link between the living and the not living."

In presence of such mysteries as these, true science must confess that for the present she is baffled. If, instead of this, she should presume to prate of eternal successions of matter and force, or of blind chance, or of evolution of life from that which has no life, or of organic matters immigrating on meteors, she will lower her own standing and reputation with thinking men, though she may impose on the credulous. Her duty here is to investigate further, and if there seems no longer any method of accounting for the phenomena by mere matter and force, to hand over her function to philosophy and religion, and retire from the scene. It is the neglect of this wise reserve that in our time sinks so much of popular science into materialism and atheism, and throws it into antagonism most hurtful to itself and to humanity, with all that is highest and best in our moral and spiritual nature.

But this aspect of the duties of science merits a more searching inquiry, more especially as this may lead us to some fundamental considerations too often overlooked in the eager pursuit of general truths and in the heat of controversy.

In science, properly so called, we are limited to the consideration of matter and force; and in so far science may be said to be materialistic, though its votaries need not on that account be materialists. But, on the other hand, we know nothing certainly of the ultimate nature of matter or force, but study only their phenomena. Again, while experiment teaches us the indestructibility of matter and force, so far as our power is concerned, we know on the one hand that they cannot be self-existent, or have existed from eternity, and on the other hand we find ourselves placed in a universe in which energy is being ceaselessly dissipated into the infinite void, never, in so far as we know, to return, and we can form no conception of the condition of the universe when this dissipation shall be complete. Thus nature seems to contradict our experiments, and to require us to believe in an unseen universe the complement of the seen, and whence all things may be restored. Thus also the legitimate materialism of science not obscurely points to

the immaterial and spiritual, and confesses itself incapable of explaining nature.

This incapacity appears still further if we follow it a little into detail. Matter itself, when viewed from the standpoint of the materialist, fades away like a dream. Its essential properties are said to be extension, mobility, and impenetrability ; but the last two really depend on forces acting on it, so that matter becomes merely extension or space in which forces may act ; and thus we may be brought to the conclusion of some so-called materialists, who paradoxically affirm that matter is a mere conflict of forces, or, in other words, has no objective existence whatever.

On the other hand, if, like the old materialists of the school of Democritus, we retreat upon atoms, we must accept these, with their various powers and properties, as things ultimate and unaccountable, and we must hold that they possess the potency of all that on this hypothesis has been evolved from them—a doctrine absolutely incomprehensible, especially when we consider that the myriad determinations of atoms into diverse forms and arrangements have to be accounted for as well as their fixed properties.

Again, materialism cannot account for life. To conclude that mere protoplasm or albumen includes all the powers of life, is to take for granted the most important point to be proved, and this in the face of the fact that the properties of dead albumen are not those of living albumen. To say that vitality is no more required in accounting for life than an imaginary principle of “ aquosity ” to account for the properties of water, is merely playing with words. It might be correct if “ albuminosity ” was all we had to account for, but not when life has to be explained.

Still less can materialism account for the phenomena of mind. Whether we say that brain secretes thought as the liver bile, or that it evolves thought as a burning body heat, we tie ourselves to the conclusion that mind must be a material thing, to be weighed, measured, and experimented on, and to be transformed back again into matter or force. This we know that it is not ; yet thought and will are powers, and are known to us

phenomenally, perhaps more certainly than we know any kind of matter.

We may, however, ask:—if these things are so, how is it that scientific investigation has appeared in so many cases to lead to materialistic atheism. Perhaps this is more in appearance than in reality. Modern science is certainly not to blame for the materialism of antiquity. While the oldest philosophies that we know were theistic, their attempts to explain the phenomena of the universe necessarily led to other conceptions of divinity than those current in the mythologies and popular faith of the time. Hence a newer school, repelled from these old superstitions, went so far as to discard theism itself, and proceeded to construct a chance universe with matter and force. In like manner, some of the atheism of our day may spring from inadequate notions of God in our received theology, and the blood of infidel scientists may be required at the hands of reverend divines who have not rightly presented the truth of God.

The tendency to atheism further arises from the prejudice of all specialists in favor of the causes they have themselves to deal with. It is also frequently produced by unphilosophical ideas of law, as if this included a primary power independent of a legislator behind it. This begets a tendency to suppose that God's personal will is arbitrary, or contrary to law, and that whenever any group of effects can be traced to a law or referred to a natural cause the action of God is thereby eliminated; whereas, if there is a God, what we call law must merely be the method of his acting, in the conditions he has himself established in the existing universe.

Perhaps, however, among more thoughtful men, the seeming contradiction between the imperfection of nature and what might be expected from an infinite mind has been the most potent cause of an atheistic tendency.

We are familiar with the sombre view of nature taken by our great English philosopher, John Stuart Mill—his belief in design in the universe, yet his doubt whether the designer could be omnipotent, or, if omnipotent, could have desired the happiness of his creatures. Yet we may not have considered the profound natural truths that lie beneath the plane of Mill's

vision, just as geological strata, with their wonderful revelations, lie beneath the soil. What is creation? It is not the addition of any new power to an Infinite Being. It is merely a voluntary local limitation of his power. Hence what we call natural law must be merely a local and temporary fact with infinite exceptions, and in many important respects the created must be the converse of its creator. If he is infinite, it is finite. If he is perfect and unchanging, it is imperfect and mutable. If he is eternal, it is transitory. For these reasons the mutations, destructions, sufferings if you will, which exist and always have existed in the universe, are not reflections of the nature of the Creator, but mere foils against which his infinite glory becomes discernible. Nature cannot be a reflection of the character of its maker except in that broken way in which rippling water reflects the sun. I do not here refer to the moral evils introduced by man, but to the necessary contrariety between material nature and an immaterial creator. We can see also that in this region lie the roots of the pessimism and dualism of certain ancient religious and philosophical systems, which, however crude, were more far-reaching than some of the philosophies of to-day, because less encumbered with scientific appliances and superfluities. We may also see in this an explanation of the growing acceptance by a certain class of thinkers of the philosophical system of Spinoza, which, whatever its defects, adheres to the old Hebrew revelation in maintaining the unity and uniformity of nature, in spite of its apparent self-contradictions, and of the want of connection of matter with mind, and of the apparent want of harmony of both with the infinite Creator.

It was also Mill, I believe, who suggested the possibility that there might be some place in the universe where two and two are equal to five. However absurd this may appear, it is nevertheless true that what we call invariable natural law must be a limited thing, and that what we now call miraculous, supernatural or spiritual, must be the action of the infinite and eternal rule, to which all our natural laws must be temporary and local exceptions, for "the things that are seen are temporal; the things that are unseen are eternal." This is a conclusion independent of any theology—a conclusion forced upon us by the conditions of thought and the phenomena of nature; a

conclusion which should teach us humility, and point out to us the limit where it is said to the science of nature, " Hitherto shalt thou come, and no farther."

Yet must the seen and the unseen be parts of one system. Nature is to our limited view like a landscape seen through the window of a railway carriage, in which the nearer objects seem flying past almost too rapidly to be discerned, while the distant hills or little patch of cloud-dotted sky seem permanent. Yet are they all parts of one fixed landscape. The parallax arising from our peculiar standpoint makes the difference.

I would not wish to be understood as depreciating in any way the adaptations of natural objects, or the wonderful contrivance, order, and beauty everywhere apparent in nature. These it must ever be at once the duty and the pleasure of the true naturalist to maintain. I remember that in younger days, before I had decided whether biological or geological studies had the greater attractions, I had occasion to dissect a ruby-throated humming-bird ; and I recall as vividly as of a thing of yesterday the impression which that marvellous structure made on me. To see all the parts of the highest type, in a mechanical point of view, of the vertebrate animal, condensed into a little creature whose solid body is not so large as the last joint of one's little finger, and to think of the power, the swiftness, the grace, the varied instincts and intelligence and feeling manifested in that tiny frame—all this was sufficient to have made one worship the beautiful little fairy, as some of our southern aborigines actually did, were it not subject to accident, to death and to decay, and were it not an obvious manifestation of a higher power. Whoever has rightly appreciated the structures and powers of a humming-bird has been introduced to a miracle of design ; and, as Gould and the Duke of Argyll have well shown, the multiplication of that miracle in hundreds of dissimilar species by no means lessens its significance. Only a mental organization diseased can see the universe as a chaos or a failure ; but we must learn to know that, after all, it is but a faint shadow of the invisible glory, and it would be an equally fatal mistake to exalt it into a God, or because of its necessary imperfection to fail to perceive its divine original.

Another duty of science is practical application ; and here

also modern science has nobly done its duty, as the vast development of scientific arts ministering to the safety and comfort of life amply testifies. I do not propose here to travel again the beaten path of laudation of the triumphs of science ; but some recent inventions point this truth so well, and illustrate the rapidity of progress in so striking a manner, that they may well invite our attention. It is but yesterday since the invention of the telephone startled us with the possession of a new power, vast in the promise of utility which it holds forth. Still more recently the invention of the phonograph has given us the power of perpetuating fleeting sound, and of handing down to future times or sending to distant places the very tones and notes of orators and musicians—of sealing up spoken words in silence for an indefinite time, and then at will giving to them all their original expression. Such a power we could scarcely in our wildest imaginations have dreamed of, and might have placed the anticipation of it in the same category with the story of Baron Munchausen's frozen horn. As if this were not enough, still another instrument, the microphone, has been brought out, which does for sound what the microscope does for light, rendering the march of a fly audible as the tramp of a charger, and opening an entirely new path of discovery with reference to sounds hitherto inaudible, and inappreciable vibrations of molecules. Yet these are simple inventions—simple, at least, after science has shown the way to them. Viewed in this aspect, they startle us with the thought how different our whole civilization might have been had the phonograph preceded the alphabet ; and we can see that even yet the literature which addresses itself to the eye may be largely superseded in the future by that which can be received by the ear. Perhaps also they may serve to impress us with the vastness of the unknown possibilities which, undreamt of as yet, may still be very nearly within reach of the scientific workers who are struggling to grasp them. What efforts, for example, are now being made to predict storms and changes of weather, and to reduce the fury of the tempest to the compass of the laws of God understood by man ; and what remarkable researches and discussions are in progress respecting the germs of these minute organisms which are the leaven of diseases and of decay ! We may be sure these

efforts will be successful. Science will yet chain and tame the demons of the storm, and shut up again in Pandora's box those germs of evil, which that old fable represents in their minuteness and their hidden energy.

A curious aspect of this subject is presented in a series of papers by Mr. Norman Lockyer, now appearing in "Nature," and treating of "Physical Science for Artists." It would seem that in many respects our brethren of the pictorial art have been neglecting to avail themselves of the progress of knowledge. Their sins in representing the sun and moon in impossible quarters of the heavens and impossible phases are well known, but Lockyer goes on to notice some less known eccentricities. The size of the sun or moon as it appears in a picture is a measurable quantity—about half a degree of the heavens. Hence the size of the solar disc in a drawing or painting may give a measure for other distant objects. Tested in this way, the landscapes at a certain recent exhibition of paintings (we need not mention where) are said to have given the following results as to the height of hills. Some mountains, according to the painters, attain to the amazing altitude of 105 miles. About an average height is forty-four miles, and hills so small as to be less than thirteen miles in height are rare. This is a trifling illustration of a fact more gravely evidenced in other matters, that science has not yet attained to sufficient diffusion to bear its fruits for the benefit of all men. None of us probably have any adequate conception of the extent to which the general application to the ordinary needs of life, of science, even as now known, would increase the happiness of mankind and mitigate the waste and loss of life and health which desolate the world, even in its most advanced and prosperous communities.

Permit me here to refer for a moment to one department of scientific work still in its infancy. I mean the science of utilizing science. Of what we know and have actually accomplished how little benefit is yet realized compared with what might be? How little regard do men pay to the physical laws already known? How little benefit do they derive from the powers we already possess? What, for instance, might be the condition of the world if all that is known of the laws of health and disease, of the means of immunity from fires, from explosions, from acci-

dents by sea and land, could be reduced to practice—if all the vast stores of material and power at our command could be equitably and usefully employed for the true benefit of all? To this end moral training and scientific culture of the whole mass of society to an extent of which we have no immediate prospect will certainly be required. We sometimes wonder at the small amount of actual command of nature acquired by the civilizations of antiquity. Our successors will wonder in like manner, and perhaps with more reason, at the little good which we derived from the vast amount of natural power at our disposal, and will probably discuss the question whether our failures were more due to moral or to mental incapacity. To them we will appear like misers gloating over heaps of gold while we are perishing of want. Surely it is one of the highest duties of science to set itself to study and, if possible, to remedy this great defect of our modern civilization, however dangerous it may be to assail a problem so mixed with social, political, and religious prejudices.

The teaching of science we have already glanced at from the side of right. Viewed from the side of duty it presents itself in a still more important aspect, since here the man of science ceases to be an isolated worker, and comes forth to make permanent impressions on the minds of his fellow-men. This is the case whether science education be undertaken as a profound and thorough professional work, or whether it be followed merely in the manner of the popular lecturer or writer.

I would here repeat, though without dwelling upon it, that the first requisite of the science teacher is that he teach in a scientific manner—that is, so far as the arrangements of educational institutions will permit. There is a constant tendency to allow science teaching to degenerate into a mere cram of text-book facts. When the teaching is carried on without proper appliances, and by teachers themselves not specialists, this is inevitable; but even where these circumstances are favorable, the teacher will find that his pupils have already, in previous stages of education, been so thoroughly trained in the system of book-cram, that it is very difficult to induce them to observe or think for themselves. I have been surprised to find that classes of young men will rather commit to memory a dry

text-book or imperfect lecture notes, than open their eyes to see for themselves and exercise their minds in perception and comparison, so thoroughly has the natural habit of observation been crushed by previous vicious training. This is one of the first evils the educator has to counteract, the next is to eradicate the habit of receiving statements on authority, and to stimulate the mind to the contrary habit of "proving all things," a scientific as well as religious duty.

As for the science teacher himself, he must be a true learner and enthusiast in his subject. He must teach what he practically knows, and this in a practical manner, so that the learner shall know it in the same way. He must, in the order of his teaching, follow nature, and not himself merely; and he must induce his pupils to observe, reason, and judge for themselves on every point, and to receive nothing either as fact or law that they cannot explain and defend. A very little of such teaching however elementary or however popular, may be the sowing of seed that will produce abundant harvests. It is to be observed also that in this way the teaching of science must react favorably on all other kinds of teaching. It has already done so, and will do so more markedly in the time to come. When this beneficent revolution shall be complete, we may hope to see students striving for excellence, because the appetite for study has been awakened in them, because they love learning for its own sake; not turning the weary treadmill of cram for hated examinations, or learning only because it "pays" in college distinctions or in some prize or medal or opening to professional life. This millennium of education, I believe, is to be introduced only by the extension and development of education in science.

One other point before leaving this subject. Every scientific man knows how painful are the travestied references to scientific facts which we find constantly paraded by way of illustration or argument by popular writers, lecturers, and preachers. But we must not suppose that the inaccurate and often absurd character of these references arises altogether from lack of information. It is often due rather to an entire want of habits of scientific thought, rendering the recipient of much miscellaneous knowledge incapable of reducing it to order, or of comprehending its true import. Here, again, accurate scientific educa-

tion is the remedy for the evil, and this perhaps not so much in the direction of the communication of knowledge of facts as in the training in methods of observation and thought.

At the present time one of the greatest temptations of the scientific teacher is that of diverging into the sphere of speculation and hypothesis, and of being induced to present such uncertain utterances as if ascertained truths of science. Our age is full of appetite for the sensational. It has exaggerated notions of the powers of science, and nothing pleases it so much as some grand and pretentious generalization, however little supported by fact. In my own department of palæontology, theories of the spontaneous origin of living beings from dead matter and of the production of species by natural selection, phylogenies or imaginary genealogies based on conjecture, doctrines as to the antiquity and brute origin of man, are examples of speculations often vaunted as actual discoveries, though at variance with the testimony of facts as at present known. Such speculations have their value, as representing the longing of the human mind after the ultimate reasons of things, and as pointing to possible lines of discovery, but the inducement to parade them as facts or known laws arises too often from that pride of supposed special insight which is so dear to the half-educated mind, and which induced the astronomers of old to profess astrology, and the alchemists to search for the philosopher's stone. They are very well when kept in their proper place as uncertain topics of discussion ; but when introduced in text-books and popular publications, they constitute treason against the majesty of truth, and entitle their promulgators to nothing less than banishment from the fair fields of science.

It is not to be disguised that much of our current scientific literature sins in this respect ; and this the more dangerously, since it mixes up the most interesting and suggestive facts with the wildest fancies. The relations of colored and odoriferous flowers to the haustellate insects, and the reciprocal benefits that flow to flowers in regard to cross-fertilization and the prevention of undue sports and varieties, and to insects in the supply of food, and to all nature in the beauty and variety communicated to it, are subjects well deserving the investigation of naturalists in their minutest details. But when the natural-

ist proceeds to maintain that this is the sole object of colored flowers and honey-loving insects, that all color is for this express purpose, that colored flowers cannot fertilize themselves, that in the past ages of the world flowers and insects spontaneously produced each other, he at once degrades his subject to a low materialistic and even repulsive position, and offends against natural truth. When Darwin remarks on the remarkable aversion displayed by monkeys to serpents, he states a curious fact ; but when a disciple proceeds to reason that this must be the cause of the aversion to serpents displayed by some human beings, and of the introduction of the serpent into the story of the fall of man, he descends to the ridiculous. His folly has not even the sublimity which it might have assumed had he insisted that, inasmuch as men and monkeys were both at one time marsupials, they may have inherited this aversion from the terror of mesozoic marsupials at sight of the dinosaurian monsters which preyed on them. The revelations of Marsh and Cope with reference to the wonderful and abounding life of the early tertiary periods in America, and the relations of these old animals to those of the modern era, are among the most striking of our time with reference to the plan of creation ; but they degenerate into what common-sense designates as a monohippic or one-horse philosophy, when, by arbitrarily selecting facts, ignoring the possibility of future discoveries, and assuming sequence in time as equivalent to causation, they are made to demonstrate the descent of the modern horse from eocene ancestors generically different. Even supposing that there is some faint possibility that the horse may have been derived from previous species of equine animals, and what is even (if that can be) less likely, that we have some means of guessing the direct line of descent, such speculations should never be placed in company with ascertained scientific results.

But it is not my purpose now to dwell on this hackneyed theme. The materialistic evolutionary philosophy of the time has been pushed to the extreme. It was from the first unscientific (and is now on the wane,) and it remains to gather up the truths which have been gained in its pursuit, and which may aid in constructing other like or unlike theories, or perhaps in con-

tributing to the solid advance of science. What I wish to insist on here is that science is not to be held responsible for speculations of this kind, which rather belong to the domain of philosophy ; and that these should not be taught as science, but that the science teacher must keep within the limits of fact and safe induction, unless he desires to be branded as a charlatan and as a professor of science falsely so called.

Science teaching has great and important duties to discharge with reference to other interests and pursuits, and with reference to the higher sentiments and aspirations of humanity. Our complex humanity cannot be all devoted to one pursuit, and scientific specialists who become mere slaves of their particular study, and who despise the feelings and pursuits of other men, are little fitted to be teachers.

Natural science is closely connected with our æsthetic perceptions, which are of divine origin, however much they may become distorted and abused. That we know the structure of a flower and can give names to its parts, is surely no reason why we should take less pleasure in its form, its colors, or its perfume. Rather it should greatly enhance our appreciation of these wonders, so attractive even to a child. That we know the structure and age of a mountain chain, or understand something of the motion of glaciers, should surely not harden our hearts against the sublimity of Alpine scenery. Rather it should fill us with new awe, in view of the time and the forces involved in the foundation of the everlasting hills. It is not too much to say that no teacher of science whose own imagination is not fired with a sense of the beauty in nature, and who fails to avail himself of the natural feeling for beauty, can be in the highest degree successful. Nay further, in addition to taking advantage of what all can see and appreciate, he must be continually bringing into view new beauties not seen by the unlearned. Such marvellous and artistic structures as the microscope discloses, in the minute parts of plants and insects and sea-urchins, in the crusts of polycystins, foraminifers, and diatoms, and in the gills of certain mollusks, are admirably fitted to enlist the interest of learners, and to enlarge their appreciation of nature. At a time when so much that is essentially monstrous is admired as art, such culture it is especially the

duty of science to give ; and it requires but a limited knowledge of human nature to perceive that the mind which has lost its relish for nature's beauties, and delights itself in grotesque or hideous productions of art, is thereby degraded even morally and intellectually.

Again, the instructor in science must not teach atheistically, or even be content with that provisional materialism which one of the great popular teachers of our time commends as expedient. Nothing can be gained by a teaching essentially false or imperfect, and which destroys that sympathy of the human soul with nature which gives to its study the greatest attractions. If, as we have already seen, mere materialism cannot explain even matter, still less life and mind, the teacher who has nothing beyond this in his philosophy is sure in the last resort to be ignominiously driven back on the (absurdities of eternal succession and of order and unity resulting from chance.) If he is content to postpone the difficulty by resting his faith on any of the popular forms of evolution, he is in no better position than the Hindu who supports the earth on an elephant and the elephant on a tortoise ; and he scarcely improves his position by placing the tortoise on an ascidian, the ascidian on a protozoon, the protozoon on a particle of protoplasm, and the particle of protoplasm on an atom. The weakness of such a system is certain to be detected by the common-sense of his pupils, unless indeed he can succeed in reducing them to the same state of imbecility in this matter with himself, which would be a pitiful outcome of science.

Nor can the science teacher logically stop short of the fullest admission of design in nature, with all its consequences. In our time the doctrine of teleology and final causes is much scoffed at by some able scientific specialists, and many unthinking persons take up the cry and profess in this matter to be wiser than the ancients. Yet even these persons, while protesting against the idea of purpose, cannot speak of nature without reference to ideas of use, fitness, and adaptation, which, on any other theory than that of blank materialistic atheism, involve design in the fullest sense. It is surely far from the duty of science to vitiate its teachings with the paradoxes of the "dysteleologists." It may indeed well be asked what object, either for science or

humanity, can be gained by an attitude of cold negation and sour misanthropy on the part of the man of science, or why he should oppose himself to even the sentimental love of the human mind for nature. The only result can be the rendering of science itself unpalatable, and causing it to be rejected as mental food, or, if received, to fail of any healthy digestion.

This leads finally to the statement that it is the duty of science to work and to teach in harmony with the religious sentiments of mankind. When it sets itself in opposition to religion, its scepticism carries with it the double reproach of (doing evil and of going out of its own way to do evil.) I take religion here in no narrow sense. Let every man construct the details of his creed for himself. I take it in the broadest sense, as the development of that one idea in which Christian, Mohammedan, and heathen agree—the belief in immortality. This is the one universal religious doctrine which spiritually dignifies humanity and elevates it above the brutes. On the one hand it leads the human mind directly to God, on the other it is itself a necessary outcome of theism. Nature cannot have been without a maker, and if there is a God, all who have ever lived, to use the words of Jesus, “live unto Him.” In that conservation of spiritual forces which is surely as real as that of the grosser energy which works the material world, no living soul can ever die unto God. Dead they may be to us, as the sunshine of last summer is dead ; but living still as surely as that lost sunshine still vibrates somewhere and for some end in the universe of God. Science itself may more or less distinctly reason out this conclusion, but independently of science it is forever fixed in the instincts of humanity, and it is madness to set it at naught.

But let us hope that such tendencies to evil companionship on the part of science as appear here and there are but evanescent, and believe that even now they are vastly outweighed by her substantial services to humanity. Let us look on the god-like form of science, as the bold and courageous investigator bringing her hard-earned trophies from every field of labor and adventure ; let us look on her as the tender and loving applier of all her treasures to relieve the wants and promote the happiness of mankind ; let us look on her as the wise and diligent

instructress, training the minds of men into harmony with nature and with God. So shall we recognize her divine lineaments. So shall we claim for her her rights at the hand of society, and shall rejoice in her fulfilment of her great mission in the world—a mission of which we have seen but the small beginnings, and which must go on blessing humanity, till, in the upward progress of our race and the development of the plans of God, science and religion, earth and heaven, the material and the spiritual, time and eternity, become one in the light of the glory that excelleth, for they are really all one in Him who is all in all.

J. W. DAWSON.

## PHILOSOPHY AS SCIENTIA SCIENTIARUM.

THE sciences are parts of a great whole, the members of a magnificent system ; each of them has manifold relations to every other. But the great whole, the magnificent system, to which they belong is itself an object of knowledge. Unless the intellectual universe be no real universe, but essentially a chaos, science must be general as well as special ; or, in other words, there must be a science of the sciences—a science which determines the principles and conditions, the limits and relations, of the sciences. This science is philosophy ; and the present paper is meant to be a plea for philosophy as the legitimate but often disavowed and insulted queen of the sciences. "Time was," says Kant, "when metaphysics was the queen of all the sciences. But now it is the fashion to heap contempt and scorn upon her, and the matron mourns, forlorn and forsaken, like Hecuba." The sciences, however, cannot do without a queen. There may be a republic of letters, but the sciences cannot constitute a republic ; they must be so connected as to form a unity ; and the science which refers them to unity and shows that knowledge as a whole is a cosmos is the supreme science, the queen of the sciences. The want of practical recognition of this truth is the main cause of the intellectual anarchy of our times.

Philosophy, as scientia scientiarum, may have more functions than one, but it has at least one : it has to show how science is related to science, where one science is in contact with another, in what way each fits into each, so that all may compose the symmetrical and glorious edifice of human knowledge, which has been built up by the labors of all past generations, and which all

future generations must contribute to perfect and adorn. With whatever province of science a thoughtful man occupies himself, he soon becomes aware that it has intimate and manifold connections with other provinces, and if he try to trace these connections out he will ere-long perceive that the sciences are not isolated things, but so bound together as to constitute a unity which is a reflection of the unity of nature and of the unity of that Supreme Reason which pervades all nature and originates all intelligence. Philosophy aims to raise the mind gradually and legitimately to a point from which this unity may be visible, while the distinctions of the special sciences are not only not effaced, but lie clearly and truthfully before it. If I seek to vindicate and magnify this aim it is not because I suppose its reasonableness is likely to be directly and explicitly denied, but because its importance can scarcely in the present day be too often or strongly insisted on. There is many a truth which is not contested, which receives a ready acquiescence of a sort, and yet which is very far from being apprehended or generally acted on, because the evidence for it is not so definitely and adequately before the mind as to counteract influences which tend to obscure it and make it practically neglected ; and that aspiration after insight into the system of science as a whole should not be lost in the study of details is pre-eminently such a truth.

Now, the first consideration which here suggests itself is that philosophy, viewed as *scientia scientiarum*, is simply science which has attained to a knowledge of the unity, self-consistency, and harmony of the teachings of the separate sciences. Philosophy seeks to do for the sciences just what each science does for the doctrines it comprehends. In this latter case separate truths are brought into unity, and in the former separate sciences. The one unity constitutes a science, the other a science of the sciences, and shows that absolutely there is but one science, although it has various departments, whereby the incommensurableness of nature is brought down to our capacities. The second and higher unity, is as natural, as legitimate, as important as the first and lower unities. It would little avail, indeed, that these existed—that there was unity enough in things to permit of the formation of special sciences—if there

were no still more comprehensive unity, if the point of view of each science was in itself final, if each science was utterly isolated from all others. If such were the case there would be in science something essentially disappointing to the human mind, for it would be of its very nature calculated not to satisfy but to thwart that love of unity which is the source and life of all scientific research. If such were the case truth would not form a fair and harmonious body, but it would resemble the mangled and scattered limbs of Osiris, while the human mind in its pursuit would be engaged in a task more mournful than that of Isis, because hopeless. It is not so, however, but

“ The One through all in cycles goes,  
And all to One returning flows.”

Science is not sectioned into entirely unconnected sciences. In all the sciences there is a certain common nature, and among them there are many ties of affinity and points of contact. There are precedence and subordination, order and harmony, among them ; so that, many and diverse as they are, they form a whole, a system in which each of them has its appropriate place, and, so far from being sacrificed to any other, has a new dignity imparted to it by being referred to the final unity of reason, the common centre of knowledge.

Secondly, philosophy, as a comprehensive survey of the sciences and a deeply grounded knowledge of their principal relations to one another, is a condition indispensable to a correct conception of the special province of any science. The boundaries of most sciences are very ill-traced, their definitions most irreconcilable. The first question which the student of any science naturally asks, What is it ? What is it about ? is one to which he can often get no satisfactory answer—one on which he finds that all the doctors disagree. Take logic. One logician will tell you its proper object is thought as thought ; another, that it is the forms as contradistinguished from the contents or matter of thought ; another, that it is only the necessary as distinct from the contingent forms of thought ; another, that it is only a kind of thought, mediate or discursive thought ; another that it is only a kind of mediate or discursive thought — inference ; and still another, that it is not thought as thought,

nor any elements or kinds of thought, but qualities of thought—truth and error so far as involved in the application of thought. And, it must be remarked, this opposition is in no way one between old and new views, between transcended and effete conceptions and those which actually prevail, but one which exists between the most deliberately formed convictions of the most eminent modern logicians. Certainly it is a somewhat perplexing puzzle to lie at the very entrance of a science. The ingenuous youth who makes his first acquaintance with logic by getting this nut thrust into his mouth is not likely, if his teeth be sharp enough to crack it, to find any subsequent problem too hard for him. It is not much otherwise with psychology, with rhetoric, with ethics, with politics, with political economy. And as to metaphysics, it fares far worse: the discordance and embroilment there baffle description, for, as Professor Ferrier so happily said, “All the captains are sailing on different tacks, under different orders, and under different winds; and each is railing at the others because they will not keep the same course with himself. One man is playing at chess, his adversary is playing against him at billiards; and whenever a victory is achieved or a defeat sustained, it is always such a victory as a billiard-player might be supposed to gain over a chess-player, or such a defeat as a billiard-player might be supposed to sustain at the hands of a chess-player.”

Now, how is such a state of things to be remedied? How are we to decide between the disputants? How make a choice for ourselves between conflicting definitions? It is obvious neither tradition nor authority can here help us, for not only are they in themselves discordant and undecided, but they have no right to overrule reason, which ought to submit to evidence alone, which is unworthy of itself when it listens to any other voice than that of truth. Nor will it suffice to found our definitions on the etymology and inherent significance of names. That may wholly mislead. Words often come to signify what is altogether different from their intrinsic meaning, sometimes what is the reverse of it. A manufacture, for instance, is not what is made by the hand, but what is made by machinery with little or no aid from the hand. Words may be stretched or contracted, where needful, to conform to realities, but realities are

not to be twisted in any way to conform to words ; and it is not with words but realities that science has to deal. It may be said, a science cannot be defined until after the study of its appropriate facts, and when the study is sufficiently advanced the definition comes of itself. And this is so far true. Although first in the order of exposition, the definition of a science is late in the order of discovery and presupposes a certain acquaintance with an appropriate order of facts, expressing, as it does, some essential characteristic which they all possess. But the question is, the difficulty is, to determine what is the appropriate order of facts, why the one chosen and not another, why an order of a given extent instead of one larger or smaller. All the views of logic, for instance, to which I have referred assign to it a natural order of facts, a sphere of real knowledge worth acquiring, a sphere with distinct enough boundaries ; and yet the natural orders are not coincident, the boundaries are altogether different, some going all round those of others, and others intersecting one another in the most perplexing ways. Now, in this case, it is obvious there is but one mode of deciding who is right and who is wrong, who has selected the proper group of facts and who groups larger or smaller, who has traced the boundaries of his science well and who ill. It is by examining whose views give to their science a place that fits in rightly into the scheme of science. The question is one of adjustment. The logician simply as logician cannot define logic, for that is an affair of the settlement of boundaries between the sort of knowledge he cultivates and contiguous divisions of knowledge, such as metaphysics, psychology, and rhetoric ; one, accordingly which can only be decided by a higher and more general sort of considerations than belongs to any special science—by considerations as to the relations of the sciences. And this holds universally. It is as impossible to fix the position of a science without reference to neighboring sciences, and even to the general system of the sciences, as to fix the position of a nation without reference to surrounding nations, and even to the general geography of the earth. In this respect a general scheme of science is exactly like a general map or like a terrestrial globe ; and like such map or globe it supplies a want which can no otherwise be provided for. An atlas with a separate

map of every state in the world cannot dispense with, cannot supply the place of, a map which will show them in relation ; nay, the more complete an atlas is in special maps the more need is there of a general one, because the more certainly and the more deeply will its student without such assistance be lost in details. And so with respect to science. The more it becomes divided and subdivided, the more urgent, the more imperative becomes a knowledge of its greater general outlines in order that each man may recognize how the department he is specially conversant with is related to others. The greater the multiplication of sciences the more chaotic must be the effect they produce unless the mind can locate them aright, can refer them to their place in a system, and see how they stand to one another and the whole.

What has now been said leads to a third consideration in favor of philosophy as viewed from our present standpoint. By a true co-ordination of the sciences and a comprehensive insight into their natures, it must help us to see how and when they can assist each other. There are problems which require a combination of sciences for their solution ; there are certain combinations of the sciences possible, while others are absurd ; and it is only through a clear apprehension of the respective natures and relations of any two or more sciences that we can perceive if one can be made to operate with another to the attainment of a given end. Some of the most important advances which have occurred in the history of science have been due to the associated action of two or more sciences. A signal instance is Descartes' application of the algebraic analysis to define the nature and investigate the properties of curve lines. It was only by the clearest conception of the relations of the two sciences, algebra and geometry, that he could have brought the symbols and calculations of the one to bear on the problems of the other, and thus start a new epoch in mathematical science. A recent instance of the same kind is the union of chemistry and optics in spectral analysis, by which the most singularly interesting results as to the physical constitution of the heavenly bodies have been attained. It will be in the future as it has been in the past. Some of the most difficult and important of the problems which are at present attracting the curiosity and trying the ingenuity

of men can only, it is apparent, find their solution from a happy combination of chemistry and physiology ; others still more vital only from the combination of physiology and psychology ; and not a few are so complex that it is vain to hope that they will be mastered otherwise than by the conjoint and concentrated efforts of many sciences. It is most erroneous to suppose, as some persons do, that the true way to advance any study is to devote the whole mind exclusively to it so as to have no thought or interest beyond it. The sciences advance by solving problems which are often presented to them from without, and by accepting hints and helps from all sides. Mathematics itself, although it has in the character of its fundamental conceptions an enormous advantage over all other knowledge as abstract science, has found its chief stimulus in the requirements of the natural philosopher, in the problems of astronomy, mechanics, optics, heat, and electricity. "The combinations arising out of external phenomena," says Principal Forbes, "are more suggestive of the possible relations of number and quantity than is the most unlimited stretch of fancy and imagination." And if even mathematics, which is based on such singularly simple, precise, definable, workable conceptions as number and quantity, thus needs light from without, and only prospers because readily responsive to external suggestions, what can be expected from, say, logic, psychology, or ethics, which have vastly vaguer conceptions to start from, attempting to proceed entirely from within, and ignoring the combinations of human nature which are presented to us in history, in literature, and in language ; what but that which we not unfrequently see—men working their way laboriously and painfully into a world of mere formulæ, of words and nothing but words, although doubtless big and brave words—a region of absolute emptiness, into which we may as well not follow them, however much we may admire the strength of constitution which enables these privileged natures to sustain life in a vacuum ?

Whatever may be fancied to the contrary, the truth is that the researches and studies of the mere specialist are never very productive. Special investigations only enrich science to any considerable extent when they are directed and guided by enlarged views ; they are only truly successful when not

exclusively special ; when, on the contrary, the part or section of existence examined is looked at by a reason illumined by a worthy and ample idea of science ; a reason which sees the part in the light of the whole and the whole as related to the part. I do not deny that now and then, by a lucky chance, a mere specialist may come across something valuable ; that an entomologist who has no interest in any thing but beetles may detect something in the eye or on the wing of some of these creatures which wiser men than himself can turn to good account ; or that the most unintelligent local antiquarian may not find in some old document or mound or ruin a fact which decides the fate of a brilliant historical hypothesis : but I do affirm that discoveries thus made are extremely rare. Have not the most minute researches of recent botanists, zoologists, physiologists, etc., had reference to the vast generalizations and bold conjectures of a Spencer and a Darwin ? What special historical researches have ended in the adequate solution of a complicated and difficult problem, except those conducted by men whose insight into the general providential plan of history, or at least of a large portion of history, was clearer and more profound than that of other men ? I know of none. Now, what does all this amount to, but just that a study, a science, is progressive and flourishing only in so far as it is impelled and guided, penetrated and pervaded, by the spirit of philosophy ; that all scientific discoveries whatever lie in the path along which philosophy leads science—along which science tends towards philosophy ?

Philosophy, understood as has been explained, is, I remark fourthly, fitted and needed to counteract the evil intellectual and moral influences of specialism. We are all narrow by nature, and we require to have our narrowness guarded against and corrected, not confirmed and intensified. Different minds have different natural aptitudes. These different aptitudes find their appropriate spheres of exercise in special studies and special departments of practical life. A man with a genius for languages may have no turn for mathematics. The born poet may be the reverse of specially qualified for success either in science or business. The shrewdness and decision of mind which go so far to insure success in the commercial world are useful gifts anywhere, but will certainly count for less in the world of learning than of

traffic ; many a man who is great, and justly great, among the merchant princes of the earth, could never have been educated into a great scholar or great speculative thinker, and that not from want of mind but from constitutional peculiarities of mind. Now, all this variety is wise and good. It makes human nature so much the fuller revelation of the divine nature ; human life so much the broader ; human history so much the richer. But the same facts which show most distinctly how wide are the thoughts of God are those which also show most distinctly how narrow are the thoughts of men. Individuals will have it that their excellences are the only excellences—the pursuits which they prefer those which all men ought to prefer. The poet looks down on the man of business as a creature of low and grovelling habits, and the latter in turn casts a sarcastic glance upwards to his aërial friend, with the suspicion that he must find his castles in the air, even by moonlight, very poor places to live in. The distinguished classical scholar need not be ashamed that he cannot stand high in mathematics, yet he ought humbly to feel that his failure is owing to the limitations of his own individual intellect : but how apt is he instead to attribute to mathematics the restrictions which are in himself ; to despise them, instead of learning the true lesson to be drawn from every failure where we have earnestly striven to succeed—a due sense of one's own littleness. So the mathematician, making his own individuality the measure of the whole universe of truth and culture, is prone to contemn many of the inquiries of the philologist as instances of learned trifling beneath the notice of serious men. Physicists and psychologists have never been noted for a candid appreciation of each other's labors. Any unfortunate science which happens to be not quite so strong as could be wished, metaphysics for instance, is almost sure to be fiercely set on by all the others, just as a poor, lame, unpopular swan is occasionally assailed by the whole flock of its companions. Now, there is only one judgment, I think, to be formed of all aversion of this sort, be it directed against what object it may. All such aversion is evil. It is a narrow and bad feeling, which we ought to beware of cherishing. Sectarianism in science, like sectarianism in religion, is unlovely in itself and baneful in its consequences. Just as nothing is morally so ruinous as cultivating a

habit of detecting only the faults and failings of our fellow-men, so nothing is intellectually more ruinous than cherishing a habit of depreciation of any kind of knowledge whatever. As in the moral life, although we cannot attain to all good, we ought carefully to cherish the love of all good, so in the intellectual life, although we cannot attain to all truth, we ought carefully to cherish the love of all truth. But this, I need hardly say, is very difficult to do in the present state of society, when the division of scientific as well as of industrial functions is extreme. A great and thoughtful poet, struck with the obvious and terrible dangers which, in consequence, threaten the spiritual life, has said :

". . . . Go demand  
Of mighty nature if 'twas ever meant  
That we should pry far off and be unraised,  
That we should pore, and dwindle as we pore,  
    Viewing all objects unremittingly  
In disconnection dead and spiritless ;  
And still dividing, and dividing still,  
Break down all grandeur, still unsatisfied  
With the perverse attempt, while littleness  
May yet become more little : waging thus  
An impious warfare 'gainst the very life  
Of our own souls."

Now truth and error are mingled here and must be separated. It *was* meant by mighty nature that we should go on, as we have been doing, " still dividing, and dividing still ;" it *was* meant that we should break down all grandeur into its constituents ; that the life which we cannot create we should yet in order to understand dissolve into its elements and view them unremittingly, " dead and spiritless" although they be ; that we should be unsatisfied " while littleness may yet become more little," while division has not reached its utmost limits, while analysis has any thing more to do. Division, analysis, is a necessary and inevitable condition of progress both in life and science. Every stage of progress must be consequent on a stage of division, spontaneous or reflective, industrial or scientific. We can well forgive a poet being slow to believe in the existence of such a law ; but the law exists, and it will not avail us to ignore it, still less to resist it. This law, however, like every other, requires to be watched and its incidental evils guarded

against. It is not more true that it is one of the conditions on which the progress of science and the advancement of society depend, than that if left to itself, if not balanced and counteracted by other agencies, it will arrest science and destroy society. But nature has provided forces with which it has only to be rightly adjusted in order that its action may be purely beneficial. If in one respect the subdivision of industrial labor has a narrowing and anti-social influence, it has in the other respect—that it condenses population within narrow circuits, associates intelligences and forces, and multiplies the objects of common interest, as well as the occasions for sympathy and the facilities for education—an influence altogether contrary, which has only to be made the most of and secured to the side of truth and goodness in order that all the evils incident to the specialization of functions in modern industry may be scarcely recognizable when laid by the side of its benefits. In a general doctrine of science, the expression of that pure love of science in its entirety which is identical with the spirit of philosophy, there is no less obviously a natural remedy for the evils incident to the specialization of the sciences. Such a doctrine would enable the specialist to transcend the bounds of his own department, to realize his relation to science as a whole, and his own relation to all his fellow-laborers in science. Limited as his own particular study might be, it would no longer be a something "dead and disconnected," but united to the ultimate principles which are the root of all science, and through that union filled with the life which the root alone supplies.

This leads me to remark that philosophy, thus viewed, would afford the most important guidance in education. It must be, indeed, the very basis of rational education in science. It must be what alone determines the course to be pursued. We cannot commence the study of science at any point nor prosecute it in any order we please. Nature has determined both where we ought to begin and what path we ought to follow. It is very far from a matter of indifference which of the mathematical sciences we commence with. If we plunge into natural philosophy without any mathematics to buoy us up we are likely soon to repent of our foolhardiness, and are certain not to swim very far. We shall make a similar mistake if we enter on moral

philosophy without having made ourselves acquainted with the leading truths of psychology. Now, a philosophy of science would inform us at once what science was the natural antecedent of any other science, the condition of its intelligibility. It would, in fixing the order of the sciences, fix likewise the order of their rational study. It would thus lay what is the very corner-stone of the science of education—that without which no such thing as a science of education can exist. And it would confer on education another advantage only inferior to this. It would show what science was most fitted to correct the mental vices generated by any other science, as well as what science was needed to render it intelligible. No one science does more than cultivate the mind in a partial and one-sided manner; and if we would have fully-developed, well-balanced minds, we must not only not confine ourselves exclusively to one, but counteract that which is exclusive and hurtful in our special pursuit by the kind of knowledge most unlike it in character and tendencies, that which it requires the most directly opposite procedure of mind to appropriate, that which exercises with most intensity the faculties which the other leaves most dormant. Those who cultivate a science which is entirely inductive, which is only in process of formation, still unsettled in its foundations, still vague and dubious in the majority of its conclusions, while they can need no mathematics merely to render it intelligible, are precisely those who will need most the peculiar discipline of mathematics; and without it their power of deduction will remain unexercised; without it the very notion of what complete proof is will never find a place in their minds. On the same principle, the study of physics and psychology should be conjoined in one culture. The one is required to balance the other. All physicists should seek a general acquaintance with psychology, and all psychologists a general acquaintance with physics. This would remove the unbecoming antagonism which has so long and widely prevailed between these two classes of students—an antagonism which has its origin in ignorance, and is a signal proof of the narrowness of intellectual conception and illiberality of feeling which are produced by specialism when left to operate without check or counterpoise. This, then, is also to be said on behalf of a science of the sciences, that it would

at once and authoritatively tell where the knowledge requisite to condition or the knowledge requisite to supplement or balance any other knowledge was to be found.

I now come to a consideration at least as weighty as any of those which have already been mentioned—namely, the interest and importance of the truths with which a science of the sciences must be conversant. The truths which lie *between* the sciences are as real and have equal claims to attention as the truths *within* the sciences. If the relations between facts are as important as the facts themselves, and every science acknowledges and proceeds on this, how should the relations between the sciences not be of extreme interest and value? When these relations are known, all the facts any given special sciences deal with, and all the laws which have been derived from these facts, have a new light shed on them by being connected, contrasted, and compared from an elevation which permits of a truthful survey. That the relations of the sciences to one another are in themselves most worthy of examination, any one may convince himself by considering for a moment what they are, what great problems they present, what grave interests they involve. How are the mathematical sciences related to one another and to physics? Do they originate in experience, or are they offshoots of a transcendental or metaphysical condition? Are there any limits in nature to their application, and, if so, what are these limits? These are questions which mathematics suggests, although it does not solve, hard and abstruse but real and not fanciful, weighty and not trivial questions, and on which not philosophers only, but men whose distinctions have been gained chiefly in mathematics, such as Courtot, Sir Wm. R. Hamilton of Dublin, Boole, De Morgan, Bartholmai, Duhamel, have written either books or elaborate essays. How are the physical sciences related? Which are simple and fundamental, which complex and applicate? What must each take from others, and what may each be made to contribute to others? These, again, are questions which all physicists, not dwarfed by exclusive specialism of pursuit into incapacity of large views of any kind, are keenly alive to; for they see that on clear and correct views regarding them the future progress of physical science is greatly dependent, and a right settlement of the practical problem,

What is a wise and well-conducted education in physical science ? entirely dependent. What is the relation of the physical to the mental sciences, or even merely, What is the relation of physiology to psychology ? No man can be so intellectually blind as to fail to perceive what a most momentous question this is. Every thinking man must answer it in some form or way ; yet if you answer it in one way you must be a materialist, if in another a pure idealist, and it is to be hoped that it can be answered also in a third way which will make you neither—which will not compel you, as a rational being, to deny the existence either of matter or spirit, either of your bodies or souls.

Then, as to the mental sciences, psychology, ethics, æsthetics, politics, paideutics, philology, philosophy of history, etc., nothing is more certain than that a very large proportion of the evils which infest them, and which have given such abundant occasion to their adversaries to misrepresent and depreciate them, are due precisely to the want of definite and correct views in their cultivators as to their boundaries and relations ; so that inquiries proper to one have been inextricably mixed up with inquiries proper only to another, and not unfrequently even this has been aggravated and confusion itself still further confounded by the introduction of the still more extraneous elements of physics, and metaphysics, and religion.

There is not less involved in the question, How is metaphysics related to physical and mental science ? There are those who suppress metaphysics entirely, who regard it as only an erroneous phase of thought, gradually drawing near to the death which is its doom, who maintain that there is no science save realistic or positive science ; there are others who, instead of thus absorbing metaphysics in positive science, have sought to absorb all positive science in metaphysics, pretended to " re-think the great thought of creation," and hesitated not to deny the law of gravitation, to blame the very stars, to pronounce the most ancient heavens wrong, when these things did not appear to conform to their deductions ; and between these two extremes, the Comtist and the Hegelian, there are innumerable other erroneous positions, into any of which it is easy to fall ; while to get sure footing on the one right spot no man can,

unless by working out for himself a correct and adequate apprehension of the relation of metaphysics to experience.

Yet even that question does not outweigh in importance this other, What is the relation of the physical and mental sciences to religion? Is there in this age of many wants even one more urgent than an answer to this question? Is it not obvious that, more than to any other cause, whatever is to be regretted in the position of men of science towards religion and of religious men towards science may be traced to erroneous conceptions of the relation of religion to science? Is it in the power of man to do higher service either to religion or science than to throw even a ray of light on this relationship, when religion and science and society are suffering so very much for the want of clear views regarding it? The discussion of it, however, naturally leads on to innumerable related questions; it is the passage, as it were, into a new world—into the vast continent whose kingdoms are the theological sciences, all of which have to be surveyed, defined, and harmoniously co-ordinated.

What I would urge as a final reason is, that a clear and distinct perception that philosophy is bound to perform the work which has been indicated will help us to realize aright what the entire work of philosophy is, or at least ought to be. No one can be more opposed than the writer of this article to the notion that the only function, or the highest function, of philosophy is that which up to this point he has been endeavoring to explain and commend. On the contrary, it seems to him to be but one of four functions, and in a sense the lowest of these functions. Comte's view of philosophy, as merely the co-ordination of the sciences, would have been an inadequate one even if he had duly recognized the existence and claims of the psychological and theological sciences. It is necessary to hold to the truth which is in Kant's view, and to the truth which is in Ferrier or Hegel's view, of the nature of philosophy, quite as firmly as to the truth which is in Comte's view. Given a complete knowledge of the relations of the sciences—given, consequently, a correct picture on the mind's eye of the whole intelligible world drawn from the highest and best established results of all the sciences; and the work of reason, which is the comprehension of itself and of its

objects so far as knowable, is still far from accomplished ; yea, its highest and perhaps hardest labors have not yet begun. Scientific thought is not necessarily self-criticising thought ; on the contrary, mere scientific thought, however rigid and methodical, is essentially dogmatic thought. It is not dogmatism, but it is dogma. It is reasoned, yet unreflective. It builds up what is admitted to be knowledge, but it does not inquire what so-called knowledge is or is essentially worth. Philosophy, so far as has been described, is such thought, at its highest perfection, or in its purest and most comprehensive form, but it has all the essential defects of such thought. It is merely an advance on special science, as special science itself is on ordinary knowledge, and ordinary knowledge on crude sensation. Along the whole line the mind never changes its attitude towards its objects ; at the end this is just what it was at the beginning. The scientist often fancies that he is a man who takes nothing on trust ; in reality, he takes every thing on trust, because he accepts without question or reservation thought itself as naturally truthful and its laws as valid. Whatever a multitude of superficial scientists may suppose to the contrary, the fact is that the entire procedure of science and of philosophy, in so far as it is simply a generalization of science, is assumptive and dogmatic. At bottom, science, which is so often contrasted and opposed to faith, is mere faith, implicit faith, and in the view of a serious and consistent scepticism must be blind faith.

Thought may assume, however, and is bound to assume, a very different attitude towards itself and towards its objects. It may pass and ought to pass from a believing to an inquiring, from a dogmatic to a critical stage. It may turn its attention and force from a study of the relations of the known to an examination of the conditions and guarantees of knowledge. What may be called *positive philosophy* naturally prepares the way for *critical philosophy*. Kant will always be honored as the man who first adequately realized the necessity under which philosophy lay to exercise its critical functions, and who gave the first general yet profound exposition of philosophy as a criticism of knowledge ; but as he erred seriously even in his conception of its problems, and still more seriously in his solutions,

the notion which some entertain of "going back" to Kant, as if Kant's *Kritiken* and critical philosophy were identical, is one of the most mischievous which can be imagined. Critical philosophy may be held to lead only to a negative or sceptical result. In this case all so-called science is but an inevitable and ineradicable illusion; all so-called knowledge is at bottom no knowledge, for it is the knowledge of nothing. In this case philosophy ends in nihilism, and might be best defined as a demonstration of the vanity of thought. Philosophical nihilism is fortunately, however, no more the necessary termination of the evolution of science than political nihilism is of the evolution of society. And believing that a thorough and impartial criticism of the conditions of knowledge does not lead to a sceptical or negative result, I believe also in philosophy as metaphysical, or, in other words, in a philosophy which is entitled and bound to elaborate a theory of Being and Becoming. Hegel, with all his faults, will probably be found much the most helpful of teachers to the student in this region. Hence the almost contemporary rise of a Hegelian school both in America and in Britain is so far to be welcomed as a cheering sign on our speculative horizon. At the same time our expectations must be moderate. The study of Hegel will never be so prosecuted by Hegelians as to be as profitable to philosophy as it ought to be. History warns us that it is only too likely to end merely in repetition and commentary. He who would study Hegel aright must study him as Hegel himself studied Kant. Philosophy as metaphysical is largely conversant with efficient causes; but, if I am not mistaken, philosophy must treat of final as well as of efficient causes, and endeavor to forecast, as far as possible, what the goal of science is, and of the world, and life, what the worth of enjoyment is, and of truth, beauty, virtue, and piety, in relation to one another and to the great final issue of existence. The progress of pessimism in drawing attention so widely and strongly to the question, What is the worth of life? has probably done much to prepare the mind for estimating aright this hitherto far too neglected phase of philosophy.

To explain even summarily my conception of the nature of

philosophy as a whole would thus require three other articles like the present. The aspect of philosophy, however, on which I have dwelt is that which must be presented first. Philosophy as positive must precede philosophy as critical, as metaphysical, and as practical. Critical philosophy, metaphysical philosophy, and practical philosophy must, further, submit to be tested by positive philosophy, by the collective results of the sciences. What has to be criticised are the conditions of all the sciences—what has to be viewed in relation to primary efficient and ultimate final causes are the results of all the sciences. The whole of accepted science is the object on which critical philosophy must direct its suspicions and to which it must direct its interrogations, and not any particular powers or functions of intelligence or any special kind of knowledge or particular department of doctrine. The whole of accepted science, if criticism does not establish scepticism, must be employed to control metaphysics and practical philosophy by supplying them with the media or data by which alone their conclusions can be verified. It would be easy to show how non-recognition or neglect of this truth has most injuriously affected alike the critical philosophy of Kant, the metaphysical philosophy of Hegel, and practical philosophy both as optimism and as pessimism.

If the view which has now been stated be accepted, we are freed from the danger of falling into either of two common and hurtful errors. The first is the identification of philosophy with some special science or group of sciences. The narrow notion that one science belongs to philosophy and another not, that the mental sciences are philosophical and the physical sciences non-philosophical, is still prevalent, but is essentially and intensely unphilosophical. There is no objection to using the terms science and philosophy popularly, interchangeably, when no harm is likely to be done thereby; but if we distinguish them there is but one view of philosophy which can justify itself either historically or logically, and it is that which regards it not as exclusive of the sciences, but as comprehensive of them. From this view it follows immediately, on the one hand, that no special science can claim to be philosophy as against any other special science, and, on the other hand, that no special science is

excluded from having the closest connection with and interest in philosophy ; that each special science, one may even say each special subject, has its philosophy ; the philosophy of any subject as distinguished from the science of that subject being the view or theory of its relations to other things, to the universe of which it is a part, as distinguished from the view or theory of it as isolated or in itself.

The other grave error to which our account of philosophy is directly opposed is that which would found it on common-sense, on ordinary knowledge, on untested and unanalyzed consciousness. In pronouncing appeals to common-sense to be illegitimate, I take common-sense in its ordinary acceptation, and censure in no degree appeals to those so-called principles of common-sense which are simply the ultimate conditions of thought as ascertained by psychological science. What I think worthy of censure is, that the science of the sciences should appeal from science to any thing lower. Science is more definite and better grounded than ordinary knowledge ; science is the proper and perfect form of knowledge ; science is knowledge in its completest and purest form ; and, therefore, wherever science can be had it is with science that philosophy has to do, and by science that it must be tried and judged. Each science reduces to order, each science develops to perfection or approximate perfection, so much ordinary knowledge ; and philosophy has to avail itself of the achievements of the separate sciences. Hence an important reduction, an important simplification, of its labor. It has not to do directly with the comparative chaos of common knowledge, but with the separate systems of order which constitute the special sciences. It ought never to appeal from the higher to the lower—from Philip sober to Philip drunk.

The idea of philosophy which has here been indicated will, of course, never find an adequate expression in a philosophical system. The writer has, however, long seriously occupied himself with the endeavor to elaborate and embody it in such measure as his faculties allow. Twelve years ago he fancied, with the presumption of youth, that he had so far succeeded that he might announce as ready for publication a work on “The Relations of the Sciences to one another, to Philosophy,

to Religion, and to Morality." Difficulties found to be not really surmounted caused delays; other work which was turned to as easier and episodical grew under the hand to unexpected proportions; and the earlier project was allowed to fall into abeyance, without being abandoned. The expectation, however, of finding leisure to realize it in a single systematic treatise, composed by a long and continuous effort, has gradually faded away, and there now only remains the hope of being permitted to do so, at least partially, by means of separate articles and essays, appearing when and where may be most convenient.

ROBERT FLINT.

## THE EUROPEAN EQUILIBRIUM.

A BODY of neighboring nations, which have reached nearly the same stage of culture, and with no system of confederation to bind them together, must of necessity have occasional collisions with one another. Let some of them be feeble and others powerful states, the fear of strong neighbors will induce the feeble to combine together for mutual defence ; or they will unite under the hegemony of one strong state against the arts and power of another which they regard as more to be dreaded. Their various commercial interests ; the feeling of brotherhood in race, or of remote relationship ; their fellowship in religion ; in short, every thing which in the course of ages creates national character, will act partly to separate them, partly to make them feel their need of each other ; the small states from age to age will appear on different sides, but on the whole most of the states will have a traditional line of consistent policy, suggested by their interests and seeming dangers.

The dangers which a circle of homogeneous states will dread will not all spring from human agency, the selfishness and ambition of other states, as a direct result ; but changes also not due to human agency, which throw power into the hands of other states without their seeking it, or take away power from a part of such a circle, will excite apprehensions. To prevent the dangers from a neighbor's relative growth of power coalitions will be formed, in the design not only of aiding a state which is unjustly attacked, but of preventing attacks as far as possible, by showing that the coalition is ready to assist its individual members against the schemes of stronger states.

The necessity of maintaining what is substantially the pres-

ent state of things has given currency to the figurative expression of the political balance of power. Nations at a given time are weights in a scale which balance one another ; but as in the balances, when a heavy weight is added, there is a disturbance, so among the nations whose political actions tell on each other, measures which one or more of them take may result in the elevation or depression, in the prosperity or calamity, of the others. To prevent this is said to be to keep the balance of power or the political equilibrium ; the nation which is strong enough to prevent or produce a change is said to hold the balance ; and another phrase, to admit a nation to a participation in the European equilibrium, denotes that the interests of this state are of too great weight to be left out of consideration, when the general European interests are brought into computation.

That a balance or something like it will fairly represent the interests of a continent like Europe, seems to be inferred from what has happened at different eras on a scale smaller than that of a continent. Among the Greek states, the contest for the hegemony—whether among the Doric states, between Sparta and Argos, or, on the larger Panhellenic scale, between Sparta and Athens,—was no accident nor result of race merely, but must be referred to a general cause, acting whenever small independent states live side by side. This is shown strikingly by the unwillingness of Sparta to allow Athens at the end of the Peloponnesian war to be destroyed : probably it was looked upon as a future ally when Thebes should become too strong. The history of Rome, it is true, shows no such balance of power : she subjugated in detail the states of Italy, and either incorporated them among her citizens, or put them into the position of dependent allies. The Latin states found it to be for their advantage to have a close union with that enterprising community, which was near to them in race and political traditions. But the states less closely allied with Rome in these respects rather strove for incorporation in and equal rights with the central governing republic, than for independence. The great social war, which tested the strength of Rome more than any other event of purely Italian history, was ended by a compromise, which added to the security that there would be no further

occasion for contending with Italian enemies. Outside of Italy, there was no possibility that any other league should arise, except of a defensive nature, against the wide-embracing, all-subduing republic. Rome employed its new subjects to aid it in extending its boundaries, but never thought of forming leagues on equal terms with nations or tribes outside of Italy. It was as solitary in its advances as the spider is when he spreads his web from one bush to another.

The balance of power thus far appears in the form of a leading state in a confederation opposing another leading state in another confederation, similar in some respects, but unlike in others. Athens, by the part it played in the great Persian war, had an opportunity to put itself forward as the head and protector of a number of small maritime states, to which the aid of a great land-power could be of no great immediate use. Its institutions, culture, dialect, all its ways of thinking, made it the natural rival to Sparta in a country like Greece, split up into a multitude of small commonwealths! Yet Sparta, having conquered Messene and humbled Argos, was unquestionably the strongest military power in the country, as well as the natural head of the Dorian communities. Some of these feared Athens, and thus made the military resources of Sparta strong. Some of them had also important commercial interests. By their aid the head of the sea-states, which had offended some of its allies and formed mad schemes of remote conquests, was beaten on land and by sea; so that at the end of the Peloponnesian war its supremacy in every thing save culture and art was forever extinguished. It may, therefore, be well asked whether this was a fair instance of balance of power. We incline to call it so, especially for the reason that after the humiliation of Athens, Thebes in its turn strove to acquire the hegemony, with no such good historical grounds as Athens had in its favor, and aided only by the fear that many of the former allies of Sparta had—that she had grown too great for their safety.

Italy, just before the dawn of the modern period, presents to us struggles for self-preservation against foreign claims of powerful sovereigns, which are much clearer instances of an attempt to secure an international equilibrium. The restorations

of the old Roman Empire under Charlemagne and Otho I., the former a deliberate movement of the popes to provide for the safety of the Roman See, brought no union with them, but only the right of a foreign suzerain to interfere in Italian affairs. But the protector became too mighty for the protected religious monarch. Hence everywhere either an anti-imperial party was encouraged in the cities by the popes, or the partisans of the emperor reduced to a minimum the ecclesiastical influence in those city-states where his faction had been predominant. Machiavelli sets forth strikingly the policy of the pope; how he wanted "to ride on two anchors," and how, in order to secure this end, he mainly spread strife and "infinite woes" through the peninsula. In the end, Lombardy was, on the whole, with the emperor, Tuscany with the pope; Venice was outside of both influences, so far as to maintain an independent position; and the South of Italy belonged to foreign kings, whom the pope sought to make his vassals. In the course of this long contest, which filled Italy with misery, but everywhere developed unnatural cunning and intelligence, the great aim was originally a reasonable one—to prevent a foreign prince, at first favored by the pope and always acknowledged by the best Italians to have some sort of authority, from stretching that power unduly. In the end, when the towns had every one its own political interests and parties, and when the emperors became little more than a name, the political factions gained an independent condition which was quite aside from their early design. This dualism in Italy can scarcely be called a balance of power, unless the name be restricted to its movements in the first struggles between the popes and the emperors.

When, however, in the times just before the Reformation, foreign sovereigns sought to make good their pretensions in Lombardy and Naples, and the Italian powers of importance were reduced to three or four—to Venice, Florence, Milan, the Papal States, and Naples, with Genoa—there arose what may be called an Italian equilibrium. The disturbance grew principally out of the invasions of the peninsula by Charles VIII. and Louis XII. of France. The desire to retain independence and the existing order of things led to combina-

tions, in which the popes naturally took a leading part. The foreign powers France and Spain were of course on opposite sides, while the Italian powers passed over from one side to the other. In 1508 we find all the Italian powers united with France for the destruction of Venice ; but soon afterwards fear of France led to a new league for the purpose of getting rid of the influence of so troublesome a power as France in the politics of the peninsula. This purpose, however, was not fully effected until the battle of Pavia brought the person of Francis I. into the hands of his great rival, Charles V.

In this chapter of history, at the close of the mediæval period, we see arrangements dictated by self-preservation, which are modified and thwarted by the personal schemes of one or another of the parties. It was all-important for the properly Italian powers that the French kings should have no control in Italy ; and yet the League of Cambray in 1508 united these powers, under the influence of the pope, for the destruction of Venice, which if effected would have rendered the independence of the Italian states much less certain. Here we find that taking place which will always happen in political combinations—one member will have feebler interests at stake than another, and will be tempted to add its weight to the opposite scale. We cannot expect that the motives of sovereigns and the interests of nations can act in history exactly as the weights act in the balance ; a series of historical changes is constantly going forward ; men die, and others, with the spirit of a new age, come to the helm of affairs ; nations come to have or to think that they have new interests, so that the equilibrium is subject to a continual disturbance.

The first instance of an equilibrium in the great European world is owing to the rise of the House of Hapsburg, which, after Charles V., divided into two lines—the Spanish, holding in its hands, together with Spain and the foreign dominions of Spain, the Low Countries, and extensive parts of Italy ; and the Austrian, which then held, and long continued to hold, the office of German Emperor. These naturally united to protect and defend the family interests, and found allies in the nations most devotedly attached to the Catholic Church ; while France stood over against them, supported by

such German princes as dreaded the emperor for political or religious reasons. With France were united in interests for the most part several Protestant princes of Germany, the Dutch provinces, England, and Sweden. When the great Thirty Years' War was in progress, France threw its weight into the scale, and Sweden more than any other power brought the war to an issue, favorable, on the whole, to the Protestants. The result was in Germany to lessen the power of the emperor; to establish a political balance, for a time, between the Catholic and Protestant princes; and to make it possible that in the course of time there should be a strife for the hegemony between the strongest of the Protestant princes and Austria from which the emperor was uniformly elected.

The Peace of the Pyrenees in 1713, besides bringing an accession of power to France at the expense of Spain, is remarkable, on account of the renunciation by the young Louis XIV. and his Spanish wife of all pretensions to the Spanish crown, in the event that the male Hapsburg line in that country became extinct. It was in this reign that France began to hold the balance in Europe—that is to say, to acquire such preponderance that all her neighbors became alarmed at the growth of her power, and formed one coalition after another, until, in the early part of the eighteenth century, she fell from her height of place in consequence of the inordinate and unscrupulous ambition of Louis XIV. With no efficient allies, with the whole of Europe against her, and worn out by the expenses of the war, France consented to humiliating terms at the Peace of Utrecht, and thenceforth until the era of Napoleon lost her position at the head of the European states.

It was a little before the end of the seventeenth century that England began to play an important part in the politics of the European continent. The point of time when this new system was fully developed was the accession of William III. to the throne, and the close union of England and Holland against Louis. William had great influence in uniting the enemies of France together; yet neither then nor afterwards could England be said to *hold the balance*, although that was his ambition. When Austria, Spain, and France successively strove for

pre-eminence in Europe, England was a weight against greater nations. But her insular position, the freedom of her constitution, her leaning towards maritime power, would have prevented her from taking the first place, as those other monarchies had done before her. And, in addition to this, when England was beginning to concern herself with the affairs of the Continent she had already spread her colonies over North America and the West Indies. Soon afterwards the factories of the East Indies grew by degrees into an empire. Such great affairs in remote parts of the world called for her attention and inclined her to peace. The great wars with France in the middle of the eighteenth century grew out of the colonial system—that is, out of the interests of commerce, and not out of a system of equilibrium and a fear of some powerful neighbor.

While England was growing in such directions, Prussia, almost exclusively an inland state, grew by conquests. The Great Elector, and then Frederick the Great, laid the foundations ; and after the recovery of the state from the disasters of the Napoleonic period, the wise system of education and of administration brought the state back into a condition of new vigor and a feeling of new power. No state of the most modern times has had so remarkable a history, or has to an equal degree changed the shape of the European world. The final act of creating a new Germany and placing itself at the head, with the separation from Austria an accomplished fact ; the complete victory over France, with the re-acquisition to the German union of Alsace and Lorraine ; the ability and vigor of the government, have placed Prussia at the head of Europe. No state at present can affect by its policy the European equilibrium to so great an extent. Yet a power so acquired and surrounded by so many disturbing forces is by no means sure of continuance.

Few nations in modern times have had so little influence on the political or moral culture of Europe as Italy. Yet a new period began in 1859 with the transfer of nearly all Lombardy from Austria to Sardinia ; and since 1870, through conquest and revolution, the whole of Italy and Sicily forms the Kingdom of Italy for the first time in many centuries. It was in accord-

ance with this wonderful advance that a place was conceded to her among the powers controlling the European equilibrium in the peace of 1856.

The result of all modern movements of diplomacy and conquest shows that since the time of Napoleon the political power of Europe has come to be more evenly distributed between the nations. The resistance of the whole Continent and of England to his domination cannot be called so much a struggle to preserve the balance of power as a struggle for political existence. No one nation among the leading powers now stands in a very threatening attitude against another ; and this, perhaps, is owing chiefly to the successful issue of the struggle against Napoleon.

Yet there is one great nation which joined the European political system in the last century, and has been increasing ever since in power of resistance, if not in power of attack. Russia first enlarged its borders on the west by the Nystadt peace in 1721, when several provinces, including Ingemannland, in which St. Petersburg was built, were ceded to her by Sweden, and remained her permanent possession. Next followed the three partitions of Poland—the most flagitious acts of modern times. Two years after the first partition, the Peace of Koutschouk-Kainardji, in 1774, secured to her a footing on the Black Sea, with other important rights. In 1809, the Emperor Alexander, at Napoleon's suggestion, made war with Sweden, and at the Peace of Friederichshamn became master of Finland and West Bothnia. In 1812, by the Peace of Bucharest, Turkey was stripped of Bessarabia and a small part of Moldavia ; and the boundary followed the Pruth, where it left Moldavia, to the Danube and the sea. The Congress of Vienna more than restored what Russia had acquired by the three partitions, and had lost by means of Napoleon's conquests. Russia had now free room to make gains from Turkey by one war after another ; to bring the principalities of Turkey under its control, not only by secret influence, but also by treaty ; and to enlarge its territories along the Black Sea, in Caucasus and in the adjoining districts of Armenia, as well as to construct an important station at Sebastopol, where its great navy might be secure. In 1840 and 1841 the power of Turkey to command the Straits of

the Bosphorus and the Dardanelles was acknowledged by the great European powers as a part of the public law of Europe. Already, a few years before this, the Sultan was protected by the treaties of London against his rebellious vassal Mehemet Ali ; and this, perhaps, is as good an epoch at which to fix the admission of Turkey to share in the benefits of European public law as any other. The main motive in this arrangement was to afford protection to Turkey against the continual encroachments of her powerful northern neighbor. But they did not cease. The Crimean War followed these treaty stipulations in about thirteen years ; and the Peace of 1856 remained unbroken for twenty years, with the exception that in 1871 Russia declared her intention of no longer respecting the agreement in regard to the neutralization of the Black Sea. If such a measure was necessary in 1856 for the integrity and protection of Turkey, it was at least as necessary in 1871. But the crippled condition of two of the powers which signed the Treaty of 1856 required that that point should be yielded, and so a very great advantage for the future was gained by the treaty-breaking power, and the equilibrium became more unstable than before.

The examples which we have drawn from history, ancient as well as modern, show that where a number of independent nations, at nearly the same point of culture, form a distinct body with the power of acting on each other, there will arise a kind of understanding that no one shall grow at the expense of the rest ; and that if any state, especially one of the first class, attempts to bring a smaller state under its control, the fears and suspicion of some of the other members of the body will lead them to protest, to form coalitions, to make war against the states which seek to violate the constitution, if so it may be called, of the continent. That this has not always happened, only means that states are not always in a condition to make war, or that the danger from a powerful neighbor does not seem so imminent as to call for remonstrance, still less for something more positive. And in addition to this more common form of intervention for maintaining the balance, states have interfered where kindred dynasties have been fused together by the expiration of one reigning house, and even where arrangements of

an ordinary kind, but suspicious in their object, have been made between powerful states.

We do not, however, affirm that the rule of the balance of power was clearly understood when it was first applied. One would expect that when the impelling motives were suspicion and self-defence, the rule, and the limits to which it could be rightfully carried, would not be very carefully looked at. The law of nations was not elaborated by the most cultivated ancient states, except in a few of its more obvious rules ; why should a rule necessarily vague, and depending on the will of weaker communities, receive an exact development ? Hence writers on public law will disagree in regard to the time when the balance of power became sanctioned by the usage of Europe or of mankind, although there is a very general understanding among them in admitting it as a principle of international law.

Mr. Ward thinks that of the balance of power, " according to the present system, the people of antiquity knew little or nothing, and that it was unknown to modern nations themselves before the time of Charles V. There is indeed," he continues, " a kind of natural policy which self-preservation will suggest to all states, of uniting against one common powerful energy whose hostility is open and flagrant ; and this is to be met with throughout the world. But *no set of nations* that I have heard of, except the moderns of Europe, have laid down *a system* to prevent *long beforehand* even the *just* augmentation of any particular power which in the end might prove detrimental to the rest. The fear of such an accession of power as may prove fatal to the independence of Europe is now held to be a fair cause of war."<sup>1</sup> Others search much farther back for the notion of the balance of power, as we have already had occasion to remark.

We pass on next to the opinion of publicists, and cite first that of Professor Heffter, of Berlin, from the fifth edition of his esteemed work on the European Law of Nations (§ 5). " International law is especially exposed to the temptation which power feels of lording it over others and of making

<sup>1</sup> Robert Ward's "Enquiry into the Foundation and History of the Law of Nations," vi. 148. London, 1795.

them subject to itself. Yet a certain equilibrium of states and nations between themselves can essentially contribute to the protection of such a common law. This equilibrium consists, speaking generally, in such a condition of things that every individual state, when it decides to violate international law in the case of others, has to expect a reaction equally strong, not only from the state that is threatened, but also from the others which belong to the same international system—a reaction dictated by the motive of opposing a dangerous change in the subsisting relations of states. Practically, a material equilibrium of single states between themselves is not conceivable—it certainly has seldom if ever existed in history; or, if at times it should exist, would be subject to constant changes, since national power does not in all states alike develop itself, advance, and decline; but such an equilibrium depends on the moral common pledge of unequal states, by means of which all the members of a society of states hold themselves obliged to prevent the hazardous preponderance of single states, and to oppose it with united strength. In and of itself, the idea of a political equilibrium is not at all a chimera, as many have regarded it, but is a most natural idea for states which acknowledge the same law of nations; only the application of it made on many occasions, and the inferences which have been founded on it, are to be rejected."

We will put by the side of Heffter a more modern German writer of high standing, Dr. Bluntschli, who in his "*Modernes Völkerrecht*" (§ 98–100) says that "the true equilibrium denotes the peaceful juxtaposition of different states. It is endangered and disturbed when an overweight of one state threatens to become so disproportionate that the security and freedom of the remaining states can no longer subsist together with this preponderance. In such cases, not only the weaker states in immediate danger from it, but the other states which are in no danger, are induced and are authorized to restore the balance, and to provide for its sufficient preservation." This principle, he adds, "holds good especially of the European family of states, which regards the continuance of a number of independent states as the fundamental condition of its welfare." To this he subjoins two somewhat

questionable remarks, one of which is that the principle will not include the case where a national state, embracing a number of smaller ones, finds it necessary to incorporate them into an empire, as the condition of national existence and welfare, or as an unavoidable consequence of the national development of a people ; having, of course, the Italy of 1860 and the North Germany of 1866 in mind. The other is that " the preponderance of a state, in some respects, can endanger the security and freedom of the other states, and therewith the equilibrium, and justifies the common resistance of the others for the purpose of restricting this domination. " An example is afforded," he goes on to say, " by the treaties of the neutral states to resist by force of arms the universal dominion of England on the sea"—referring, we suppose, to the two armed neutralities. But to contend against a law of a great maritime power which is claimed to be oppressive and tyrannical is one thing, to contend for the balance of power is another. We doubt whether any exertion of power on the sea alone, unassisted by power on the land, can materially affect this balance, and fail to see how the preponderance would be affected by a change in regard to rules of convoy, or of certain privileges of coasting trade or laws of blockade.<sup>1</sup>

Dr. Wheaton also regards the balance of power as an acknowledged principle of European public law. In his history—we use it in the French form—he quotes Hume with favor as trying to show that, even if the ancients had no exact theories of the balances of powers, they had applied it in practice ; and mentions several cases of such practical use, as that one which we have already mentioned, when the Athenians took the part of Thebes until the Spartans were crippled by them at Leuctra, but afterwards sided with Sparta to prevent Thebes from becoming too great.<sup>2</sup>

Of the modern application of this kind of intervention he thus speaks.<sup>3</sup> The primitive idea of a systematic arrangement

<sup>1</sup> Dr. Bluntschli's strong and decisive opinion against many rules of English maritime law in the past appears in his " *Beuterecht im Krieg, und das Seeberecht im besondere*," published the present year at Nordlingen, in Germany.

<sup>2</sup> Hume, " *On the Balance of Power*," his seventh essay.

<sup>3</sup> § 2, under the First Period.

for guaranteeing to states, included within the same sphere of political action, the uninjured possession of their territories, and other sovereign rights, is as ancient as the science of politics itself. Nevertheless, we must admit that the first example of the effective application of the system of equilibrium to that perpetual *surveillance*, which has since been habitually exercised over the respective forces of the European states, cannot be distinctly assigned to an epoch more remote than that of the development which their politics received after the invasion of Italy at the end of the fifteenth century.” He then quotes the system of intervention contained in Fénelon’s “*Examen de la Conscience sur les Devoirs de Royauté*,” written for his pupil, the Duke of Burgundy. “When a power,” says Fénelon, “is reaching a point such that all the neighboring powers together can no longer resist it, all these others are justified in making a league to prevent that growth, after which there would be no longer any time to defend the common liberty.” “But in order legitimately to make these kinds of leagues, which tend to prevent the excessive increase of a state, the case ought to be real and pressing: the states ought to content themselves with a defensive league, or at least not to form an offensive one, except so far as the just and necessary defence shall be contained in aggressive measures; still further, to treaties for offensive purposes precise bounds should be placed, in order never to destroy a power instead of restraining it.”

Dr. Phillimore discusses this principle of the balance of power at large, occupying most of his pages with illustrations.<sup>1</sup> One of the forms of the right of intervention for self-defensive purposes is “the right of third powers to watch over the preservation of balance of power among existing states, whether by preventing the aggressions and conquests of any one power, or by taking care that, out of the new order of things produced by internal revolutions, no existing power acquires an aggrandizement that may menace the liberties of the rest of the world.” At the close of his discussion of the subject he remarks that “the maintenance of this doctrine does not require that all existing powers should retain their present territorial posses-

<sup>1</sup> Vol. i. of second edition, pp. 481-511, or §§ 402-407.

sions, but rather that no single power should be allowed to increase them in a manner which threatens the existence of other states. The doctrine, properly understood, does not imply a pedantic adherence to the particular system of equilibrium maintained by existing arrangements, but it is opposed to such an alteration of the balance as tends seriously to disturb the relations of existing states.

Dr. Twiss, in his "Rights and Duties of Nations in Times of Peace," which is the first part of his Law of Nations, while he simply rests the right to maintain the balance of power, or the European equilibrium, on the right of confederacy, without defining the meaning or extent of the terms, furnishes us with some instructive instances of their use in treaties and in diplomatic language. Thus, in the treaty between Great Britain and Spain, in 1713, the treaties of Utrecht are said to have been concluded "*ad formandam stabilendamque pacem et tranquillitatem Christiani orbis justo potentiae æquilibrio.*" "The maintenance of the balance of power in Europe," continues Dr. Twiss, "is expressly set forth in the acts of renunciation to the crown of Spain executed by the French princes of the House of Bourbon, which are inserted in the body of the treaties, as the express cause of the renunciation. "One main object of the Congress of Vienna, next only to that of settling a general peace, was to secure the maintenance of the repose of Europe by a readjustment of the balance of power. The intentions of the allied powers in this sense had been avowed by them in the preamble of the Convention of Paris (23d April, 1814)." So also the five powers who met by invitation of "the King of Holland to assist him in the settlement of the disturbed relations between the Belgian provinces and the Dutch crown, placed formally on record their view of the grounds which justified their intervention. Having expressly stated that the original object of uniting the Belgian provinces with Holland was to establish a just equilibrium, they proceed to say that the five powers had a right, and that events imposed on them a duty, to prevent the Belgian provinces, as an independent state, causing any disturbance of the general security and the European equilibrium." And again, in the Treaty of London, in 1852, for establishing an order of succession in Denmark harmonizing with that of the

Danish duchies in Germany, it was declared that "the maintenance of the integrity of the Danish monarchy was intimately connected with the general interests of the European equilibrium."<sup>1</sup>

The profession of faith in a European equilibrium is often repeated in the diplomatic papers of the time of the great Russo-Turkish war of 1854 and onward. We meet with such expressions as these: "Their majesties being freely persuaded that the existence of the Ottoman Empire within its actual limits is essential to the maintenance of the balance of power;" "the projects of Russia are subversive of the European equilibrium;" "the revision of the treaty of July 13th, 1841, ought to have for its object to connect again more completely the Ottoman Empire with the European equilibrium;" a favorite expression, which we have noticed in four places at least—"a war which had menaced the equilibrium of Europe and the integrity of their own states;" "a meeting which ought to regulate questions of general equilibrium."<sup>2</sup> In fact, no great war was ever waged in which the definite object of the war as preventing the disturbance of the equilibrium was more clearly expressed.

During this war and the preparations for it a part of the English Liberals stoutly opposed it; and one of them, a man justly held in the highest estimation, had already written against the theory of the balance of power, which became, some years afterward, one reason for declaring it. Mr. Cobden, to whom we refer, published this pamphlet entitled "Russia," in 1836, on account of an alarm suggested in that year by the report of a Russian invasion; Mr. Bright defended the same principles in the debates during the Crimean War; and now, in Mr. Cobden's political writings, published together during the last year, we have the essay reprinted. The third chapter is devoted to the balance of power. The doctrine of the chapter is what would be expected from one of the leaders of the Manchester school. The theory of the balance rests, he says, on a chimera, and indeed on a

<sup>1</sup> § 104, in several places.

<sup>2</sup> Murhard, "Recueil Général des Traités," vol. xv., pp. 557, 633, 640, 565, 668, 681, 682, etc.

tragic one. "Our history during the last century may be called the tragedy of 'British intervention in the politics of Europe,' in which princes, diplomatists, peers, and generals have been the authors and actors, the people the victims ; and the moral will be exhibited to the latest posterity in eight hundred millions of debt." "The first instance," he goes on to say, "in which we find the balance of power alluded to in a king's speech is on the occasion of the last address of William III. to his parliament, December 31st, 1701, where he concludes by saying : 'I will only add this: If you do in good earnest desire to see England *hold the balance of power in Europe*, it will appear by your right improving the present opportunity.' From this period almost to our time there will be found in almost every king's speech a constant recurrence to the 'balance of Europe,' by which, we may rest assured, was always meant, however it might be concealed, under pretended alarm for the 'equilibrium of power,' or the 'safety of the Continent,' the desire to see England 'hold the balance.' "

But what is this balance? "Such of our readers," continues Mr. Cobden, "as have not investigated this subject will be not a little astonished to find a great discrepancy in the several definitions of what is actually meant by the balance of power. The balance of power is a chimera! It is not a fallacy, a mistake, an imposture; it is an indescribable, incomprehensible nothing; mere words, conveying to the mind not ideas, but sounds like those equally barren syllables which our ancestors put together for the purpose of puzzling themselves about words, in the shape of *Pryster John*, or the philosopher's stone! We are bound, however, to see what are the best definitions of this theory."

He then gives the definitions of Vattel, Gentz, and Brougham, all of which involve some sort of union or understanding; and he denies that any such has existed, affirming that the theory of balance of power has been interpreted, by those who from age to age have, parrot-like, used the phrase, to be a system invented in order to supply the want of a combination or confederation. It is, in fact, "a phantasm without definite form or tangible existence; a mere conjunction of syllables, forming words without meaning. Yet these words have been

echoed by the greatest orators and statesmen in England ; they jingled successively from the lips of Bolingbroke, Chatham, Pitt, Burke, Fox, Sheridan, Grey, and Brougham." Nay, he adds in a note, the phrase was adopted by Napoleon, who told O'Meara, at St. Helena, that he refused to permit the Emperor Alexander to occupy the Dardanelles, because if Russia were in possession of Turkey the balance of power in Europe would be destroyed.

The balance of power, his conclusion is, " *might*, in the *first* place, well be dismissed as *chimæra*, because no state of things such as the ' disposition,' ' constitution,' or ' union ' of European powers, referred to as the basis of their system by Vattel, Gentz, and Brougham, ever did exist ; and, *secondly*, because the theory could on other grounds be regarded as *fallacious*, since it gives no definition—whether by breadth of territory, number of inhabitants, or extent of wealth, according to which, in estimating powers, each state shall be estimated ; whilst, *lastly*, it would be altogether complete and inoperative, from neglecting or refusing to provide against the silent and peaceful aggrandizements which spring from improvement and labor."

But admitting, for the sake of argument, that this balance is a reality, " upon what principle is Turkey made a member of the European system ? Turkey cannot enter into the political system of Europe, for the Turks are not Europeans."

There yet remains but one other point of view, from which Mr. Cobden looks at this question of the balance of power. " Russia in possession of Constantinople, say the alarmists, would possess a port open at all seasons, the materials for constructing ships ; vast tracts of fertile land, capable of producing cotton, silk, wool, etc. ; and she would be placed in a situation of easy access to our shores : all of which would tend to destroy the balance of power, and put in danger the interests of the British commerce in particular. But New York, a port far more commodious than Constantinople, is open at all seasons, and possesses all the advantages of the city between the straits ; yet we have never heard that the North American continent forms any part of the balance of power. Nor is this all. There is an entire southern continent, from the Isthmus of Panama to the point of Cape Horn, likewise entirely omitted.

Mercy on us ! twelve separate empires of South America, and the vast expanse of territory, settled and unsettled, under the dominion of the Government of Washington, and altogether comprising one third of the habitable globe, have been quite forgotten in a balance of power." He confesses his inability to explain why Russia should enter into the estimates of the balance and the United States be passed by. It cannot be from closer neighborhood, nor from Russia's greater share in European commerce, nor on account of the more important materials furnished by Russia to England. " It would be difficult to find any other satisfactory answer than that which we are able to give as the reason of this exclusion : *America*, with infinite wisdom, refuses to be a party to the balance of power." And he praises Washington for bequeathing as a legacy to his fellow-citizens the injunction that they should never be tempted to become parties to the states' system of Europe. " As little intercourse as possible betwixt governments, as much connection as possible between the *nations* of the world,"—this he commends as a source of American prosperity. " And when England," these are the closing words, (" *without being a republic* ) shall be governed upon the same principles of regard for the interests of the people, and a like common-sense view of the advantages of its position, we shall adopt a similar method for our policy ; and then we shall hear no more mention of that costly chimera, the balance of power."

The United States may well be envied by the other nations of Christendom, for the very reason that it is not tempted or forced by its position to form a league with other weak states against some unscrupulous conqueror, and still more for the reason that they have as yet had no such policy as would force other states into a league against them. Had their position in the world been different, had they belonged to an old world, where nations are in close neighborhood, they might have been in more need of Washington's advice and have heeded it less. Let us suppose that a disruption had been the result of the war of the secession, that a number of independent governments had arisen on the ruins of our republic—is it not altogether unlikely that combinations for mutual safety would have made their appearance on this continent, as they have done elsewhere?

We may lay it down, then, that if the equilibrium be not a mere chimera it must be confined to a *certain quarter* of the globe. There is as near an approach to the culture of Western Europe in the United States as there is in Russia, and yet the forces of the latter are within marching distance of Paris or London. While no one in the present age apprehends the invasion of England or France by fleets and transport-ships from this side of the water, there are possibilities that Russia and Prussia, if in close alliance, might employ one of the western kingdoms with defending its own territory, and thus checkmate the plans of the other in the Orient. If there is an equilibrium, those states which act or are acted on by it must have some apprehension from one another, must feel the necessity of forming alliances for defence or aggression. But the separation which an Atlantic Ocean causes removes causes of fear, and lessens greatly the temptation of states on its opposite shores to engage in wars of ambition or of conquest. There may therefore be a European, but there cannot at present, probably there never can be, an “œcumeneal” equilibrium.

This remark may be put in another shape: Distance in international operations is measured not by leagues and degrees, but by the difficulty or ease, the cheapness or costliness, with which armies—which must in the end decide the quarrels of states—can be transported to the scene of action. A war between France and the United States, for instance, if it took the shape of a war of invasion, would be regarded by multitudes as absurd and fruitless. A war of Russia with a western European power is quite practicable, if its armies could march to the vicinity of, or into the lands of, one of them. This happened once, when the means of transporting and of provisioning troops were less than they are now. Alexander I., defeated, at Friedland in 1807, entered Paris as a conqueror seven years afterward.

In accordance with this remark, a nation with a vast navy is by no means so dangerous a neighbor as one with a vast army. For aggression and invasion a navy is only an auxiliary force. For distressing an enemy's commerce it may be useful; but for striking directly at a nation's life, it is a weapon of secondary importance. Hence, if we are not deceived, no nation is much dreaded on account of its naval power. By this arm of its

power it can spread its operations over the world, but it cannot, by this arm alone, become a world-wide conqueror.

Akin to this remark is another, that colonies scattered through all parts of the earth cannot affect an equilibrium of power between states, except in a small degree. The value of remote colonies does not consist in adding to the offensive force of a nation : in fact, when these are in their infancy they need protection, and contribute little aid to the mother country when it is attacked. A nation with colonies on every continent has points of attack which use up its resources, while one which is compact and can unite its strength against its enemies at a few points is more likely to come unscathed out of a struggle.

Still less will a nation affect the balance of power on a continent by devoting itself to the operations of industry. Suppose it to have become rich and great, it will not, of course, equally increase its political influence by these means, for a country plays a part in the world which is by no means proportionate to the average wealth of its inhabitants. Long use in the arts of peace renders it disinclined to devote its energies to the arts of war. Its labor is all needed in commerce and manufactures. It may have lost the vital power which must be found in a warlike people. It lends its money to those who fight, but for itself prefers an easy, quiet life. It may even defend itself by mercenaries, because its own people are wanted as sailors and artisans. Besides this, these pursuits of industry are not apt to bring it into collision with other nations ; and they cannot complain or feel injured when it increases the products of the world, taking more from others and offering them more in return. Thus mere greatness or extent of territory, mere thrift and economy, advance in culture or in luxury, as they cause in others no apprehension, rather make such a prosperous nation inert in politics than ambitious. It may be an ally in war to defend itself against an ambitious neighbor, but will do little to make itself dreaded. All its tendencies and wishes are in another direction.

Mr. Cobden is entirely right in affirming that the inevitable changes in the world affect the equilibrium between states ; that thus it must be mutable and unstable ; but it is not thence

to be inferred that it is a chimera, with no substantial existence. Power, influence, wealth, good government, pass from one nation or state to another. A state may be so strong in one age as to *hold the balance*—that is, have the principal voice in council, and to be most dreaded by its foes; and in another age it may be crippled, dismembered, or overshadowed by the superior ability or success of a rival. There will be an equilibrium all the while. When the state which held the first place and gave the law to weaker ones is itself weakened and deposed from its hegemony, the balance continues; that is, those who dread the encroachments of superior power still provide for their defence by some understanding or treaty, and among them may be found this formerly preponderant state, now humbled and contracted in its dimensions. Generally, however, there will be found no one state able to control the rest; but two systems of states, with some not belonging to either system, but ready to join one or the other, as their interests for the time may dictate.

The causes which lead to the formation or the change of a political equilibrium are as numerous as the causes which unite states for mutual self-defence. Besides those which arise from natural changes, we ought to mention such as render a nation peculiarly obnoxious to its neighbors, owing to its want of faith, and unscrupulous ambition. When it is found that a nation has great projects of aggrandizement in view, which it may put off, but seems to be bent on carrying out at some future time; when it has already for this end sacrificed truth and justice, it is, of course, a suspected member of a circle of nations, and will provoke others into alliances against it. It is thus that lust of power becomes the ruin of states which pursue an unprincipled and faithless policy; and the political equilibrium exhibits the process of combination, which either deters them from the pursuit of their plans, or unites others in resisting or in punishing them. If the states of a certain part of the globe were entirely isolated, leaving each other to the attacks of powerful neighbors without providing against future wars, each of the weaker would be conquered in detail by the stronger; and one or two colossal powers might swallow up half a continent. Thus the equilibrium is for the advantage of

the weaker and more peaceful states, rather than for that of such as are able to stand alone. And thus we may find that something like a loose confederacy will grow up in such political communities as those of Europe. A strict confederacy would there be impossible, except on a very small scale. But alliances may exist for years and perhaps for centuries, until time, by changing the relative power of nations, calls for a new adjustment. The old plan on which certain states organized their operations or understandings for self-defence now ceases to work well, and requires a reconstruction.

We may here ask what it is which states intend to guarantee by this relation of equilibrium. Is it *all the interests* of each other in remote parts of the world? Is it each other's political system? Is the equilibrium ever a plan to gain or prevent others from gaining a commercial monopoly? Or is it even an attempt to force other nations into rules of intercourse which they have in times past opposed? None of these objects can be aimed at either reasonably or righteously, or, in the end, successfully. Every nation must seek its own independent way of becoming prosperous; and the equilibrium has respect only to political objects, and to the prevention of means of injuring the prosperity of others, which affects all alike. If, for instance, Great Britain fears the influence of Russia in the remote East, and imputes to her the flagitious policy of sowing disturbances in her dependencies there, that may be a motive for England to join in a league of self-defence with other powers which have other grievances against Russia; but it cannot be required of the other members of the league that they should aim to promote objects which are exclusively English. The equilibrium is constituted by European states and for European ends. If the allies of England against Russia conceive it to be their true policy, they can meet Russia and aid England in any part of the world, but the maintenance of the equilibrium imposes no obligation on them in this respect.

We now come to the special fact of the introduction of new members into the European system. And first we will inquire into the meaning of the diplomatic phrase already quoted, as in the words that the "revision of the treaty of 13th July, 1841, ought to have for its object to attach or unite more completely the existence of the Ottoman Empire to the European equilib-

rium (*de rattacher plus complètement l'existence de l'Empire Ottoman à l'équilibre Européen*), and to put an end to the preponderance of Russia in the Black Sea." By the last words it might seem as if the diplomats who penned the memorandum conceived of the Russian naval power as the great object of terror. There was need, they might conceive, of two fleets in those waters—the Russian and the Turkish, to prevent Russia from growing too formidable in the end upon the Mediterranean. But if we take the whole passage together, we shall have no doubt that a paraphrase something like the following will fairly express its meaning. Russia, by her marvellous growth and acquisitions at the mouth of the Danube and along the northern coast of the Black Sea, will ere-long command those waters, and have a dangerous control over the straits. Nearly all the small states or dependencies of Turkey, Russia has already at her beck. Turkey, holding by the law of Europe those states, and by ancient regulations of her own barring the passage of war vessels through them, blocks up and protects at once the Russian navy on that sea. If things go on as they have gone on for years Turkey will be conquered. It is necessary for the equilibrium of Europe, which is disturbed by Russian preponderance, that Turkey should be aided and defended. Thus, though already long in treaty relations with the Christian states, it was true policy to declare her entitled to the benefits of a rule or system, by which other states in times past have aided against a powerful neighbor, who otherwise would have crushed and brought her into a state of dependence.

If Turkey had been a small Christian state before, there would have been no need of such a declaration. It would, without question, have been invited to co-operate with the states which were hostile to Russia. But its religion and the ancient dread of its arms had prevented its being regarded as a member of the state system of the west; and a sort of introduction, by consent of the nations, was held to be a necessary measure.

There was, however, nothing new in the fact that Turkey was brought into a scheme of European politics when the time was come for such a step. England, as we have already had occasion to say, had had very little to do in European affairs before the era of Louis XIV. The Scandinavian countries,

Poland, and Prussia belonged to a circle of their own, until Sweden first played an important part in the Thirty Years' War. Russia at the same era had less to do with Europe than any of the present important kingdoms of that continent—much less than Turkey. On the other hand, some states which then were a weight in the balance are of little or no account. Spain is decrepit and without consideration. The importance of the kingdom of the Sicilies, of Portugal, of Hungary, of Poland, has passed away. Italy seemed destined to a political slumber, when a few years brought to her a revival of power and of hope by that scarcely hoped for event of a union of the whole peninsula, Sicily included, under one government which already places itself by the side of the great powers of Europe.

Turkey would not have been “attached to the European equilibrium” but for Russia’s marvellous growth, and her steady adherence to the plan of blotting Turkey out of the map of Europe. This is made apparent not only by the wars and treaties since the Peace of Adrianople in 1829, but by the well-known conversations of the Emperor Nicholas, in 1843, with the English ambassador at St. Petersburg, in which he urged the British Government to unite with him in measures proceeding on the assumption that the Turkish Empire was near its end. If these two powers should have their plans laid, the rest of Europe, he thought, would be unable to set them aside. The discourse turned on one of these occasions to Constantinople, and the occupation of it by the Russians. “I will not tolerate,” said the emperor, “the permanent occupation of Constantinople by the Russians; having said this, I will say that it shall never be held by the English, or the French, or any other great nation. Again, I will never permit the establishment of a Byzantine Empire there, or such an extension of Greece as would render it a powerful state; still less will I permit the breaking up of Turkey into little republics, asylums for the Kossuths and Mazzinis and other revolutionists of Europe.” In quoting these words, and there is much more of the same kind, we aim only to show that it was necessary to put Turkey under the protection of the Western powers, for its own existence and for the defence of Europe from an overgrown power, and one which has since shown its disregard of treaties. We abstain from political speculation; we forbear to ask

whether it was wise for all the Christian states, signatories to the Treaty of 1856, to guarantee the integrity and independence of the Ottoman Empire ; we only claim that it is most convincingly shown that if that empire was to stand, it would require to be supported against the will, if not against the arms, of Russia. Turkey, the more it was borne into the stream of European affairs, was growing weaker, both by its own wretched misgovernment and by the intrigues and arms of Russia. To decide that its defence and subsistence was necessary for the maintenance of the equilibrium was a plainer call for the application of that principle than almost all the others which we have had occasion to mention.

May we be allowed, in closing this article, to sum up in the briefest way our views in regard to the nature and the limits of the European equilibrium. It is, then, among states which are near enough together to influence each other's political relations and safety by force of arms, a kind of mutual guaranty, partaking of the nature of a loose and fluctuating confederacy, by which ambitious and unscrupulous powers may be deterred from carrying out plans regarded by other nations as dangerous to their prosperity. It is an intervention to prevent a powerful state from striking a blow which would put in jeopardy the independence of weaker powers. The plans thus opposed by combinations of surrounding states may not of necessity involve direct hostility, but, like the union of territories by marriage of rulers or by extinction of one branch of a reigning house, may be such as to create the necessity of providing against hostility in the future.

On the other hand, the growth of a state in its industry and commerce, even if the result may be to draw business from the marts of other states, is no disturbance of the equilibrium, and furnishes no cause of complaint whatever. An increase of means of defence, on the land or on the sea, may require explanation or be a motive for like increase on the part of other powers ; but, as we have already hinted, the increase of a navy alone, if called for in order to protect possessions in remote parts of the world, would afford no just reason for suspicion, and ought to arouse but small apprehensions of danger. Nor ought increase of colonial possessions to be put among the serious causes of alarm in regard to the balance of power, for colonies

make nations vulnerable as much as they make them powerful, and in fact rather distribute their energies over the world than help them to strike a blow in any one quarter.

Finally, a change of political institutions in any country is no good reason for apprehending a disturbance of the equilibrium, although it be attended with zeal and even with proselytism in the country where the revolution breaks out. Every country which submits to a revolution must allow its neighbors to act their choice in regard to following its example; and if it be said that the political fever can be kept within its original bounds only by resistance or even by striking the first blow, the woes that befell Europe from such a course of treatment just after the French Revolution are sufficient proof of its folly.

We may be permitted, in closing our remarks, to felicitate our country in that neither its form of government, nor its position and neighborhood in the world, nor any conceivable aims of its own, will be likely to make questions touching a balance of power any thing more than historical speculations. Whether so vast a fabric will be solid enough to stand under the blows of time, it would be idle to affirm. But we may say with reason that a cluster of republics would be free from some of the causes of mutual jealousy which monarchies subsisting side by side would feel, since among the latter personal ambition would have greater scope; we can be sure, also, that there are no existing states in the world which would purposely pick a quarrel with us, when they must send their fleets and armies across a thousand leagues of sea to decide it; we can be equally sure that no unions of remote and neighboring powers will seek to engage in serious wars against us; nor can we at present conceive of any such madness as would urge us out of our sphere to enter into the wars of the European world, or into any foreign wars. As for a balance of power, then, whether embracing only the States of this western continent, or taking up a yet wider room, we may assure ourselves that no such is likely to exist. A balance means danger from abroad, from a neighbor, and there are no neighbors for us to fear.

THEODORE D. WOOLSEY.

## COPYRIGHTS AND PATENTS.

WHETHER the right of property results from occupation or labor, or is solely the creation or operation of law, whatever its origin, whatever its incidence, property exists ; and it is the business of law, in any civilized society, to protect its enjoyment. Nor is there any difference between real and personal property and literary or artistic property, or less need for the law to protect the right enjoyment of the one than of the other. Who labors harder than an author or an artist ? The mind, the fountain of intellectual riches, the soil where the tree of knowledge grows, must first be replenished with the waters of learning, must first be enriched with things new and old. And that needs labor and expense, years of study and research, of hard toil and honest endeavor. The over-exertion of the brain to produce force is too often disastrous. And if it is arduous the taking in of knowledge, how hard its letting out ! Yes, it was well said,

“ With curious art the brain too finely wrought  
Preys on herself, and is destroyed by thought.”

Books, the written impress of hard-conceived thoughts, are indeed intellectual property, the offsprings of our mind, understanding, diligence, and genius, the emanations of the noblest part of our being, the immortal children which often immortalize their fathers. And more than any other species of property, intellectual and artistic property needs the protection of the law for its enjoyment ; for whatever else may be retained by possession, the products of the mind altogether elude the grasp. We may, indeed, keep our thoughts to ourselves. We may lay an embargo on a manuscript, and prevent it to be published by any

other person (Jefferys *v.* Boosey, 4 H. L. C., p. 815; Prince Albert *v.* Strange, 1 Mac. & Goi. 25; Duke of Queensberry *v.* Shebbeare, 2 Eden, 329). But deliver it to a publisher, allow it to be printed, and its pages are past recovery, thrown on the mercy of the wide, wide world, and exposed to abuse and piracy, the easy prey of greed or plagiarism.

What, then, is copyright? It is a public recognition of property; if not in our ideas themselves, at least in the peculiar form in which they are presented. It is the right, the exclusive right, to copy, print, engrave, photograph, translate, abridge, and multiply what we have ourselves produced by pen, pencil, or chisel. It is the right, not only to the possession of the original, but to the exclusive privilege of making copies of the same, without which the original itself would be comparatively of little avail. Separate, in fact, the right to the original manuscript from the right to reproduce it, by printing or otherwise, and who would give himself the trouble of writing a poem or a piece of music? Yes, the full, the sole right of copy is granted because deserved; and freely granted because its advantages are, in the end, proportioned to, though often falling immensely short of, the amount of instruction or delight any intellectual or artistic work has succeeded in producing. Lord Camden said, "Glory is the reward of science, and those who deserve it scorn all meander views." But glory does not satisfy human wants; and an author, be he a Bacon, a Newton, a Milton, or a Locke, is, after all, a man—aye, too often a poor man.

The recognition of literary property is a matter of comparatively modern date. The monopoly granted to the Stationers' Company, the restraining powers placed in the hands of the Archbishop of Canterbury, and the decrees of the Star Chambers, though of the nature of a monopoly, were intended rather as a check to indiscriminate printing and publication than with a view to favor either author or publisher. When the press was still but a recent invention, the state deemed it proper to prevent or restrain its possible licentiousness by keeping it under its control, and by requiring that no book shall be printed without a license of the state and the consent of the owner. But the right of the king to grant the sole privilege of printing was questioned, and that abuse ended with all the manifold abuses

of those days of arbitrary government. Long, long after that time the Stationers' Company pretended to possess the sole authority to print almanacs and prognostications of all kinds ; but they, too, found that it would not be submitted to. When a Mr. Carnan, a bookseller in St. Paul's Church Yard, in 1755, began to print almanacs without any license or permission, the Stationers' Company opposed the intrusion, and brought the case before the courts (Stationers' Company *v.* Carnan, 2 Bla. Rep. 1004). The position assumed by the company was ingenious, if not convincing. They pleaded their privilege on the ground that the printing of such almanacs was a trust inherent in the Crown, and delegated by the Crown to the company ; that it stood upon the same footing as the right of printing acts of Parliament ; that it related to the religion of the country, as all festivals and fasts are regulated by the almanacs ; and that the regulation of time was in all countries a matter of state. But such reasonings could not avail, and the courts decided that the Crown had no prerogative on the subject, and that the monopoly of the almanacs was not tenable. Still the rights of the Stationers' Company on the books they printed remained ; and they endeavored by special ordinances to protect the rights of its members, and to seek for penalties against the violation of the same. Thus early were injunctions sought for and obtained against the reprinting of the "Whole Duty of Man," and Nelson's "Festivals and Feasts," and Milton's "Paradise Lost."

The right of the sovereign, as head of the church, to grant a patent for the printing of the Bible is still exercised in England on behalf of the Queen's printer and the universities ; and it would be difficult to say whether the claim is made as one of prerogative right or expediency, for while the exclusive right of printing the translation of the Bible is founded partly upon prerogative and partly upon purchase, in practice it is defended on the ground of securing the correct printing of the Bible. A committee of the House of Commons in 1859 inquired into the condition of the Queen's printer's patent, which expired in 1860, but the Crown renewed the patent during pleasure. If the question should be reconsidered in connection with the revised translation now in progress, wherein the revisers and the publishers have doubtless acquired a copyright, the argu-

ment must be, what is the best interest of the entire community, of the whole English-speaking people, in the matter? Should the Bible continue to be held as the private property of the sovereign or of the universities, or as the common property of the nation? It is difficult to conceive of the maintenance of private copyright in the Bible. Hitherto, the question presented itself as one of printing rather than of copyright, for the number of readers was far too small to admit of any payment to writers. The first said to have received any compensation for copyright or for the right of copying was Dr. Hammond, for his annotations on the New Testament; but what he received must have been a very small sum. In those days of utter darkness, Milton sold the copyright of his "*Paradise Lost*" for the miserable pittance of five pounds. In truth, inferior authors were then doomed to starve or beg, and the more fortunate trusted on favor and patronage. As soon, however, as a reading public began to show itself, copyright became a question of interest; and it was found necessary to decide whether or not, according to the common law of England, authors did enjoy a perpetual copyright in their works. The point not being free from doubt, the act of Queen Anne was passed in 1709 (8 Anne, c. 19), professedly for the encouragement of learning, which secured to authors a copyright—that is, the sole right of printing their works for fourteen years, with another term of fourteen years, if living, at the expiration of the first; making in all twenty-eight years at most. Still, long after the passing of this statute a custom was carefully observed among publishers not to interfere with one another's lapsed copyright, and thus practically a kind of perpetual copyright was recognized. So much was the practice adhered to, that the Court of Chancery continued to grant injunctions for the protection of copyright seventy or even one hundred years old. But it was not to be expected that every one would abide by such an honorable understanding; and the question came to be decided, in the case of a reprint of "*Thomson's Seasons*," how far had the right of authors been affected by the statute of Anne. Had they still a copyright at common law, or a natural right against piracy of their works after the expiration of the fourteen years granted by the statute? Or had they bartered a natural perpetual right

for a statute right of fourteen years? In the case of *Millar v. Taylor* (4 Burr, 2303), the court held that an exclusive and permanent copyright in authors subsisted at common law. In the case of *Donaldson v. Becket* (4 Burr, 2408), which occurred five years after, the House of Lords decided that the common-law right of action, if any existed, could not be exercised beyond the term limited by statute. In the opinion of some of the judges, including Lord Mansfield, perpetual copyright was just and reasonable, and therefore valid at common law. Other judges held that, since to treat as property every thing that a man produces by intellectual labor would be impossible if not absurd, as it would give a man copyright in his conversation, if it be expedient to grant to authors and artists the right of property in their work, that right must be within proper limits, and well defined. The decision being contrary, no further attempt was made to revive copyright at common law, and excepting the act (15 Geo. III., c. 56) which gave perpetual copyright to the universities, the 41 Geo. III., c. 107, which extended copyright to Ireland, and the Consolidation Act, 54 Geo. III., c. 156, which lengthened the term to twenty-eight years absolutely, and further for the life of the author, if then living, no essential change was made in the law of copyright till Mr. Serjeant Talfourd brought the claims of literature before the House of Commons.

Serjeant Talfourd's pleadings for the rights of literature were pointed and earnest. In answer to those who refused to recognize any property in thought, who saw no property except in lands, goods, or chattels, he inveighed with special fervency. "What," said he, "has he, the man of letters, invested no capital, embarked no fortune! If human life is nothing to your commercial tables, if its sacrifices of profession, of health, of gain, is nothing, surely the mere outlay of him who has perilled his fortune to instruct mankind may claim some regard. Or is the interest itself so refined, so ethereal, that you cannot regard it as property, because it is not palpable to sense or feeling? Is there any justice in this? If so, why do you protect moral character as a man's most precious possession, and compensate the party who suffers in that character unjustly, by damages? Has this possession any existence half so palpable

as the author's right in the printed creation of his brain? I have always thought it one of the proudest triumphs of human law, that it is able to recognize and to guard this breath and finer spirit of moral action, that it can lend its aid in sheltering that invisible property which exists solely in the action and affections of others; and if it may do this, why may it not protect him in his rights, those words, which, as well observed by a great thinker, are, after all, the only things which last forever?" After years of labor and exertion, Serjeant Talfourd, aided by Lord Mahon, succeeded in passing the measure in 1842, and that act (the 5 and 6 Vict., c. 45), which gave to the author copyright for life, and seven years after his death, or for forty-two years from the date of publication, whichever period may happen to expire first, is still in force in the United Kingdom.

Thirty-six years have, however, passed since then, during which literature, science, and art have made enormous strides. Numerous questions also concerning copyright have been raised of a nature often the most perplexing. Special copyright acts have been passed for the protection of dramatic pieces (3 and 4 Wm. IV., c. 15), lectures (5 and 6 Wm. IV., c. 65), engravings, etchings, lithographs, prints (8 Geo. II., c. 13; 7 Geo. III., c. 38; 17 Geo. III., c. 57; 6 and 7 Wm. IV., c. 59; and 15 and 16 Vict., c. 12), sculpture (54 Geo. III., c. 56; 13 and 14 Vict., c. 104), and designs (5 and 6 Vict., c. 100; 6 and 7 Vict., c. 65; 13 and 14 Vict., c. 104; 21 and 22 Vict., c. 70; 24 and 25 Vict., c. 73 and 75; and 39 Vict., c. 93). Authors have been going to and fro. The interests of distant colonies in literature has been awakened. International copyrights have been recognized by special conventions, and the need of a greater concert on the subject all over the world has been felt. Therefore we need not wonder that it has become necessary to revise the copyright laws, and to consider where do they need amendment and consolidation. Hence the appointment of a royal commission in England for the purpose of making inquiry with regard to the laws and regulations relating to home, colonial, and international copyright, the report of which has recently been issued. The commissioners were Lord John Manners, Earl of Devon, Sir Charles Lawrence Young, Sir Henry Holland, Sir John Rose, Sir Henry Drummond Wolff, Sir Louis Mallet, Sir Julius Bene-

dict, Sir James Fitzjames Stephen, Q.C., Messrs. Farrar Hereschell, Q.C., M.P., Dr. William Smith, Edward Jenkins, M.P., James Anthony Froude, Anthony Trollope, and Frederick Richard Daldy. And among those who gave evidence before the commissioners were publishers, as Messrs. Longmans, Macmillan, Routledge, Blackwood, Murray, and Rivington; men of letters and science, as Professor Huxley, Herbert Spencer, and Professor Tyndall; artists, as Sir Francis Grant and Thomas Woolner. The report itself is exhaustive and excellent; but upon many points there was no accord between the commissioners, and it is significant that as many as eight of them signed the report subject to dissent from important paragraphs.

Most persons are agreed that authors have a right to compensation for their intellectual and artistic labors, and any objection raised against copyright as a monopoly is not nearly so strongly put as against patents, and for many and valid reasons: because, whilst there can be no rival claimant to the authorship of any particular book, many persons may, honestly and indisputably, lay claim to originality in an invention; because, whilst when you buy a book you may do what it prescribes, when you buy a specification of a patent you find in it just what you must not do; and because, whilst copyright does not prevent any one from applying any published work to the future development of science, a patent does so. Still there are points about the law of copyright by no means so clear and unobjectionable, and which demand serious attention with a view to amendment.

Three interests are affected by the law of copyright in a very direct manner—the booksellers and publishers, the authors, and the general public. Booksellers and publishers are essentially merchants and manufacturers. If not at their bidding, at least by the encouragement they afford, a host of writers are continually producing scientific and amusing books, histories and novels, educational and theological works, large folios, and the tiniest pamphlets. By their order printers are continually putting types together, and multiplying the production of writers to an enormous extent. They engage bookbinders in stitching and covering the endless sheets of printed paper. They enter into contracts to supply any number of volumes at home and abroad. They invest a large capital and incur heavy

responsibilities, with a view to profit. Some books prove to them an excellent investment.. Others, and perhaps the largest proportion, have but an indifferent success, or produce only a total loss. It is but natural to expect, under such circumstances, that publishers will take care of themselves, and pursue the way of trade in buying at the cheapest and selling at the dearest market. Only they are subject to great competition ; and if the returns on their capital should be too large, we may be certain that, like other traders, they will not be allowed to enjoy them long undisturbed. As a class, booksellers are enlightened and judicious ; but as merchants and manufacturers, have ever been the last to apprehend what is the best and most productive economic policy : so we should not be prepared implicitly to accept the opinions of publishers in matters of copyright.

Authors, on the other hand, whether they write in the interest of their profession or for the promotion of objects of special fancy, whether they be amateur writers or professional writers, have generally but little notion of business. With booksellers there is calculation ; with authors, only hopes and expectations. Few of them ever expect any remuneration for their labor, at least in a direct manner from the sale of their works. Some are satisfied with whatever amount of popularity they can thereby win for themselves, or with seeing their names printed on the title-page of the book. Some count beforehand upon losing money, besides time and labor ; and many more place themselves implicitly in the hands of their booksellers, and are satisfied in becoming the expectant reversioners of any good thing the booksellers may be able to place at their disposal. The aristocracy of *belles lettres* is, we fear, even more limited than the aristocracy of wealth. There are usually four modes of publishing a book. The author may sell his work in manuscript to the publisher for a specified amount, giving him an assignment of his copyright, and leaving him to bring out his work according to his fancy. Or the author may retain his copyright, pay all the expenses, undertake all risks, and get a publisher to publish his work on commission. Or the author may retain his copyright, incur no risk, and only allow the publisher to print and issue an edition of a certain number of copies, for a sum agreed upon. Or, lastly, the author and publisher

may issue the work at their joint risk, and on such other terms as they may agree. Whatever may be the nature of the agreement, however, the business part is wholly intrusted to the publishers, the duty of the author being simply to supply the manuscript.

But there is another party whom booksellers and authors alike must consult ; and that is the general public. Are books published in sufficient quantity and at moderate prices ? Are existing arrangements adapted to the increasing requirements of the people ? Are good books, and in readable types, brought out sufficiently cheap ? Must a novel be always published at a guinea and a half ? What is meant by publishing books at a price thirty or forty per cent higher than they are ever sold at ? And are not books published in too sparing a manner, in order to secure for a length of time a monopoly price ? From the manner the different issues of a library, a student, and a popular edition are brought out, it would seem as if they were intended as so many concessions to an undeserving public. It was proved in evidence and beyond contradiction, that 1000 copies of Macaulay's Life sold at 6s. per copy would produce to the author and publisher quite as much as 250 copies at 15s. ; and that it would pay an author and publisher better to issue an edition of 3000 copies at 5s. 6d. a volume than one of 1000 at 12s. Is the advantage of the extension of literature and science by the publication of a larger number of copies ever taken into consideration ? Alas ! the general public has not much reason to be satisfied with the present working of the system. Were it not for the extension of public and lending libraries, and for the active competition among retail dealers, a large portion of the books published would never pass beyond the upper classes of society. Have booksellers yet to learn the first lessons of political economy respecting supply and demand ? Do they not see the wonders of the penny newspapers and the success of the penny periodicals ? Do they not notice how every reduction of duty and every reduction of prices enlarges the number of consumers of the necessaries and even luxuries of life ? Let them bear in mind that the number of persons able to read and write, as tested by the proportion signing their names in the marriage certificates, has increased within the

last thirty years at least fifty per cent ; and that the progress of elementary education is such, that in another twenty years there will not be a man or woman unable to read and write. What provisions are being made for this altogether new condition of things ? We must leave booksellers to judge the best mode of carrying on their business, and they are quite able to take care of themselves ; but the privilege of copyright is, after all, in the hands of the legislature, which must see that it be used for the advancement and not for the retrogression of learning.

It was suggested to the Copyright Commission, and the proposal met the earnest support of one of its most eminent members, Sir Louis Mallet, whether, in the interest of literature, it might not be better, instead of granting to the author or his assigns the exclusive right of publication, to entitle any person to copy or republish the work upon paying or securing to the owner a remuneration in the form of a royalty, or a definite sum, prescribed by law, payable to the owner for each copy published. It was alleged in favor of the proposal that it would secure to the public an early publication of cheap editions, that a greater competition would be thereby engendered among publishers, and that a larger sale would result, advantageous alike to the author and the public. Against this, booksellers alleged that their chance of profit would be greatly reduced by such a system, and that with diminished profits their power to remunerate authors would be in proportion diminished. We fear that the system of royalty would not work : because we could never think of allowing a state officer to control the cost of books ; because it would be all but impossible to define what shall be a reasonable royalty in any and every case, or what proportion should it bear to the selling price of any book ; and because the system is incompatible with the existence of copyright. The principle of copyright is right. Within certain limits, let publishers and authors have full scope and freedom to do what they consider just and proper. Do not discourage production, be it material or intellectual. Grant freely to the author of a poem, or of a theatrical piece, or of a treatise, as well as to an artist, a painter, a sculptor, a musician, the guarantee which they respectively require, as to time and space, for benefiting by their labor ; for otherwise the public will suffer from a diminu-

tion or a declension of literary and artistic production in quantity or quality. But remember that still other modes may be suggested for compensating authors and encouraging literature, and the system of royalty among other suggestions may deserve consideration. With some modifications, it may yet be the most convenient method to be pursued with regard to the colonies, and once admitted within the range of practical legislation, who knows but it may be applied with advantage in home legislation for the encouragement of literature, science, and art.

The subject-matter of copyright may be artistic or literary. It may be a book—that is, a volume, or part or division of a volume—a pamphlet, a map, or a chart. It may be a dramatic piece or an entertainment, such as a tragedy, comedy, play, opera, or farce. It may be a lecture, or it may be a piece of sculpture, a model, or copy, or cast of the human figure, or of any animal, or of any other object. It may be a painting, or an engraving, or the negative of a photograph. And as the subject-matter is so different, so the term of copyright differs very considerably; for books, the present term is forty-two years from publication or for the life of the author, and a term of seven years, beginning from his death. But the commissioners propose a prolongation of the term, viz., to thirty years from the death of the author, or from the deposit of the book for the use of the British Museum, in the case of anonymous works. The reasons alleged for such prolongation are, that better provision may thereby be made after the death of the author for his family, that all the copyrights of the same author may expire at the same time, that the termination of copyright may be certain and easily ascertainable, and that nearly all other countries have adopted the author's life, and a fixed number of years after his death, as the measure of copyright. In these days of railway speed, when the real worth of books is so soon tested, a curtailment rather than an extension of the term might be better advocated. Nor do we think that authors are likely to benefit by the increased term of copyright. No change is proposed in the term for essays or articles in any review, magazine, or encyclopedia, which is for twenty-eight years. In the case of a dramatic piece or an opera, the copyright—that is, the sole liberty of representing, or causing it to be represented or per-

formed, or the sole liberty of publishing it as a book—is to be for the same term as for a book, commencing at the first public representation or performance, or with the publication of such piece or opera as a book. So with respect to lectures, the copyright of which extends so as to prevent redelivery without leave, as well as publication by printing, the term is to be the same as for a book. Copyright for all works of fine art, other than photographs, is proposed to be the same as for books; and for photographs, for thirty years after the date of publication, except when originally printed as part of a book, in which case it would follow the copyright in the book. In all cases the term allowed seems far too long, for thirty or forty years are not needed, in almost any kind of work, to compensate the author or publisher. Copyright for an extreme length of time unduly fetters the circulation of literature. Concede, by all means, a reasonable copyright; but after that, any one should have the right to publish the work on payment of a royalty to the original author or his assigns.

It is not an easy matter, with the technicalities introduced in the construction of copyright statutes, to say on whose behalf copyright may really be claimed. Copyright, as we have seen, is a right wholly regulated by statute law; and in England such law applies indiscriminately to all residing within the state, whether natural born or naturalized, or alien friend simply living in it for trade or otherwise. Therefore, a foreigner domiciled in England, although neither naturalized nor made a denizen, if he composes a literary work there, would acquire a copyright in it. Will, however, the protection of British copyright be granted to a foreign author for a work written abroad, but first published in England? Bellini, an Italian residing at Milan, composed the work of *Sonnambula* in 1831, and in the same year transferred the copyright in the same to Ricordi, a music-seller of the same place, who came to England and assigned the same copyright to Messrs. Boosey & Co. for publication in the United Kingdom only. Accordingly, Messrs. Boosey & Co., having made due entry at Stationers' Hall, exposed the opera for sale at London, whilst Messrs. Ricordi did the same at Milan. But soon after, Messrs. Purday & Co., without any permission from Messrs. Boosey, republished some airs from the same opera in

London, disregarding and denying the existence of any copyright. Messrs. Boosey brought an action against Purday & Co. for the infringement of the same, and Purday having contended in answer that there could be no copyright in *Sonnambula*, the work having been written abroad, the court decided in the same sense—that is, that Bellini, a foreigner, by sending to and first publishing his work in Great Britain could acquire no copyright there (*Boosey v. Purday*, 4 Ex. 145). A few years after this decision, Messrs. Boosey brought an action against Messrs. Jeffery & Co. for another breach of copyright in the same musical composition, and again it was decided by Baron Rolfe that they had no copyright in the *Sonnambula*. To this, however, a bill of exceptions was tendered, and the case went to the Exchequer Chamber (*Boosey v. Jeffery*, 6 Ex. 580), when judgment was given by Lord Campbell, to the effect that if an alien, residing in his own country, were to compose a literary work there, and continuing to reside there, without having before published his work anywhere, should cause it to be published in England, in his own name and on his own account, he would be an author within the meaning of the statute for the encouragement of learning, and might maintain an action against any one who in this country should pirate his work, provided, however, the work was first published in England. An appeal or writ of error was thereupon brought to the House of Lords, and there the judgment of the Exchequer Chamber was reversed, it having been decided that the statute of Anne could only affect British subjects, properly so called, or such persons who might obtain that character for a time by being resident in this country, and therefore under allegiance to the Crown and under the protection of the laws of England; that the statute referred to books printed, and first published in England, and not to books printed abroad and then imported into the United Kingdom; that Bellini must have resided in England in order to possess the copyright, that therefore he had no legal power to assign that copyright as regarded this country, and that since the assignment was not valid the right of action against Jeffery could not be maintained (*Jeffery v. Boosey*, 4 H. L. C. 815).

What, however, will constitute a sufficient residence to en-

title a foreigner to the benefits of the law? This point engaged the attention of the British courts of justice for several years. Messrs. Sampson Low & Co., an American publishing house established in London, purchased from Miss Cummins, an American authoress residing at Montreal, the copyright of a work entitled "Haunted Hearts." The copyright was duly registered, and the work was published in England; yet, soon after the publication, Messrs. Routledge printed portions of the same work. Messrs. Low complained of the infringement of copyright (*Low v. Routledge*), and Messrs. Routledge answered that copyright could not be claimed, the authoress being an American, an alien. And so the question before the court was, whether an alien, while resident in a colony or possession of the British crown, first publishing a work composed by him, could acquire, according to the law of England, a copyright in that work; and the court decided in the affirmative. It was brought before the Lords Justices in 1866, and there also the judgment was confirmed. Two years after, it came before the House of Lords, and there a final decision was given, which gave a wider and more liberal construction to the statute than had ever been given. The decision was to the effect that the protection of copyright is given by the act to the author who first publishes in the United Kingdom, wheresoever that author may be residing, or of whatever state he may be the subject. Lord Chancellor Cairns said: "The benefit is obtained, in the opinion of the legislature, by offering a certain amount of protection to the author, thereby inducing him to publish his work. This is, or may be, a benefit to the author; but it is a benefit given, not for the sake of the author of the work, but for the sake of those to whom the work is communicated. The aim of the legislature is to increase the common stock of the literature of the country, and if that stock can be increased by the publication for the first time here of a new and valuable work, composed by an alien, who has never been in the country, I see nothing in the wording of the act which prevents, nothing in the policy of the act which should prevent, and every thing in the professed object of the act and in its wide and general provisions which should entitle, such a person to the protection of

the act in return, and compensation for the addition he has made to the literature of the country" (37 L. J. N. S. C. 454). The persons capable of obtaining copyrights are therefore, first, a natural-born or a naturalized subject of the United Kingdom, in which case the place of residence at the time of the publication of the book is immaterial; second, a person who, at the time of the publication of the book in which copyright is to be obtained, owes local or temporary allegiance to the state, by residing at that time in some part of the same; and, third, an alien friend who first publishes a book in the United Kingdom, even although resident out of the same—the latter being a principle established by jurisprudence only, but now recommended by the commissioners to be made positive by statute.

The principal aim of the copyright law being to increase the general stock of learning within the United Kingdom, the limitation of that appellation, as distinct from the British Empire, opened up a difficulty as regards the colonies. What if an English work by an English author be published in India? What if it be published in Canada or in any other British colony? They are parts of the British dominion, and yet they are in some respects less favored than a foreign state. Thus, by a strange anomaly, a foreigner publishing an English work first abroad may obtain copyright in England and the colonies. An Englishman first publishing abroad will lose his copyright at home. But a colonist who publishes first in his own colony is not able to obtain copyright in the United Kingdom. Copyright in the United Kingdom extends to every part of the British dominion; but if a book be published first in any part of the British dominions other than in the United Kingdom, the author cannot obtain copyright either in the United Kingdom or in any of the colonies, unless there be some local law in the colony of publication under which he can obtain it within the limits of that colony. How shall we remedy these anomalies? Either by giving to the British subject the same right throughout the British dominion, whether the work be first published in the United Kingdom or in any colony, or by throwing the benefit of imperial copyright freely open to all authors, without regard to nationality or prior publication elsewhere, who publish within the British dominion. The Copyright Commissioners

recommended the latter of these alternatives, and suggested that where a work has been first published in any one of the British possessions the proprietor of such work shall be entitled to the same copyright and to the same benefit as he would have been entitled to if the work had been first published in the United Kingdom. Nay, more, the commissioners recommended the practical abandonment of the condition of first publication in the United Kingdom, so that a British author who publishes a work out of the British dominion shall not be prevented thereby from obtaining copyright within the same by a subsequent publication therein, provided it be within three years of the first publication. So, in the same manner, that the first performance of a dramatic piece in a foreign country shall not injure the dramatic rights in this country. And as to aliens, the commissioners suggested giving them the same rights as British subjects, if they first publish their works in the British dominions.

The operation of the English law of copyright in the colonies is in some respects even more vexatious than at home, for the colonies are unable to take advantage of the many ways, such as clubs, free and circulating libraries, by which the general community at home succeed in neutralizing the hardships of practical monopoly. A copyright book in the colonies can only be purchased at its high publishing price plus all charges of carriage, insurance, and extra profits—a serious matter to people in most cases in condition far from affluence. In Canada, the restriction becomes the more vexatious, inasmuch as their near neighbors in the United States, untrammelled by international copyright, succeed in obtaining books at half or a third of the price that they can be purchased for in the colony. In 1847, a colonial act was passed in Canada to modify the cost by permitting the importation of foreign reprints on condition that a customs duty should be imposed of twelve and one half per cent, the amount collected to be paid to the British Government for the benefit of the authors interested (10 and 11 Vict., c. 95). But only an insignificant sum was thus obtained, as the revenue could not be collected. The measure thus practically failed. A copyright act was passed in 1875 in the Dominion (38 and 39 Vict., c. 53), which granted to every person domi-

ciled in Canada or in any part of the British possessions, or being the citizen of any country having an international copyright treaty with the United Kingdom, being the author of any literary or artistic work, power to obtain copyright in Canada for twenty-eight years; so that colonial copyright may now be secured by any British copyright owner concurrently with the copyright under the imperial act. And many British works have been reproduced in the Dominion, with the permissions of the British copyright owner, which are sold at considerably lower prices in the Dominion than they would be sold for in England. But such measures are found insufficient to provide a proper supply of English literature at cheap prices for colonial readers. And the commissioners propose to meet the want by the introduction of a licensing system in the colonies, and by continuing, though with alterations, the provisions of the foreign reprint act. Should, however, such colonial reprints be allowed to be introduced into the United Kingdom? The law now is, that no person, except the proprietor of the copyright, can import into the United Kingdom, or into any part of the British dominion, for sale or hire, any book composed or written or printed or published in any part of the United Kingdom, and reprinted elsewhere. Let it be remembered that in the case of colonial reprints the proprietor himself has given permission for the same, and why should not the public in England benefit by what the publisher has permitted in the colonies? This case is totally different from the importation of foreign reprints, where no such permission is asked; and if we give to the publisher an enlarged market, extending all over the colonies of the empire, it is but right that the monopoly price should be proportionally modified.

Copyright exists in most countries. In France, perpetual copyright was guaranteed from very early times. The Ordinances of Moulins of 1566, the Declaration of Charles IX. in 1571, and the letters-patent of Henry III. constituted the ancient legislation on the subject; but the sovereign had a right to refuse the guarantee whenever he thought desirable. In 1761, the Council of State continued to a grandson of La Fontaine the privilege that his grandfather possessed, on condition, however, that he should not assign it to a bookseller. The Revolu-

tion of 1789 modified this régime, and now copyright is guaranteed to authors and their widows during their lives, to their children for twenty years, and if they leave no children, to their heirs for ten years only. According to French law, a French subject does not injure his copyright by publishing his work first in a foreign country. No matter where the publication takes place, copyright forthwith accrues in France on his behalf, and on the necessary deposit being effected its infringement may be proceeded against in a French court. Moreover, a foreigner publishing in France will enjoy the same copyright as a native, and this whether he has previously published in his own or in any other country, or not. In Prussia, copyright continues for the author's life and for thirty years after his death. In Austria, the term is the same. In Holland, copyright is limited to the life of the author and twenty years thereafter. In Denmark, it is for the author's life and thirty years. In Sweden, for life and twenty. In Spain, for life and fifty years after. In Russia, for life and twenty-five years, and for ten years more if an edition is published within five years of the end of the first term. In Greece, copyright is for fifteen years from publication. In Italy, for life and forty years, with a second term of forty years, during which any one can publish the work upon paying a royalty to the author or his assigns. In Belgium and Spain the subject is now under consideration. But what of the United States of America? The Constitution of the United States provides that Congress shall have power to promote the progress of science and useful arts, by securing for a limited time to authors and inventors the exclusive right to their respective writings and discoveries; and also to make all laws which shall be necessary and proper for carrying into execution the foregoing powers. Accordingly, many acts have been passed by Congress since 1790 establishing a common law of copyright. Nor have the States separately been less ready to acknowledge literary property. The States of Connecticut and Virginia, in the preamble to their laws, stated "that it is perfectly agreeable to the principles of natural justice and equity that every author should be secured in receiving the profits that may arise from the sale of his works." The State of Massachusetts laid down that copyright is one of the natural rights

of all men, there being no property more peculiarly a man's own than that which is produced by the labor of his mind.' By the law now in force in the United States, any citizen or resident therein, who shall be the author, inventor, designer, or proprietor of any book, map, chart, dramatic or musical composition, engraving, print or photograph or negative thereof, or of a painting, chromo, statue, or model, may have a copyright for the term of twenty-eight years from the time of recording the title thereof, and for fourteen years more if recorded anew within six months before the expiration of the same. There is, therefore, full recognition of literary and artistic property in the United States, as in almost every civilized country.

In the most essential elements there is a wonderful harmony in the laws of copyright of all countries. But unfortunately there is nothing in them to give mutuality of rights to the subjects of different States. No provision is made stretching the protection of copyright beyond these limits. The law of England, for example, is clear on the point that if the work of a foreign author be brought out first in his own country, or in any country other than in the United Kingdom, his productions become *publici juris* there, mere common property, to be turned to the profit of any one that chooses to avail himself of it, unless such foreign author can find protection under a public mutual arrangement between this realm and the state of which he is a subject. There is no reason indeed why we should be so narrow and restrictive in our policy, why we should be so unjust to the rights of foreign authors. If we recognize literary property in a native subject, we should equally recognize it in a foreigner, nationality having nothing to do with it; nor should we need any reciprocity on the matter. Let us do what is right, whatever may be the policy of other states. However, what is wanting in internal legislation is supplied by international copyright. The grievance of international piracy found expression during the Congress of Vienna,<sup>1</sup> when Austria, Wür-

<sup>1</sup> During the Congress of Vienna, in 1815, a requisition was presented by deputies of German booksellers, and in the name of the great republic of letters in Germany, asking for a law to repress the offence of piracy over the whole of Germany. Several governments had already forbidden it. The Elec-

temberg, and Baden were the principal centres of literary brigandage. The reprinting of works printed in a foreign country, far from being deemed a piracy, was then held as a right, which might be lawfully exercised. Prussia was the first to set a good example in the matter, by prohibiting the sale of every counterfeit edition of works printed in any part of Germany, and a convention between the different members of the German Confederation was concluded in 1837. On the following year, England passed a statute founded on a liberal spirit, in furtherance of the same principle. In 1846, England entered into a convention with Prussia, in 1851 with Hanover, in 1851 with France, in 1854 with Belgium; and so such treaties were multiplied, and they constitute now a new and an important branch of private international law.

The main provisions of such treaties consist in securing to the contracting parties a mutuality of literary protection, so that the republication or piracy in either country of any work of literature or of art published in the other shall be dealt with

tor of Hanover in 1753 made representations on the subject to the imperial city of Frankfort, and in 1768 he spoke strongly against it to the Regency of Bamberg. The Electors of Saxony had made several ordinances on the subject. The Prussian code not only prohibited piracy within the state, but rendered it illegal to import books so pirated. The Emperor Charles VI. gave redress to the Russian Government for the piracy of a work published by the Academy of Sciences of St. Petersburg. Kant, Fichte, Schleitwein, wrote against it. The celebrated Sonnenfels of Vienna, as President of the Commission of Studies, wrote a memoir on the subject. The faculty of law of Leipzig and Würtemberg; jurists such as Boehner, Gundling, and Werner, condemned piracy. Luther expressed himself in this language: "Why, then, do you printers steal from one another openly? Are you become brigands and robbers? And do you think that God will bless and prosper your wicked dealings?" Voltaire said: "The law which prohibits the introduction of a book the copyright of which belongs to the state, is doubtless just, necessary, and useful. It is an act of protection which each state owes to its national industry and commerce." The memorial prayed the Congress to pass some measure for the repression of piracy, and was signed by Dr. Frederic Justin Bartuch, of Weimar; Dr. Jean George Cotta, of Stuttgart; Jean Frederick Harknoch, of Leipzig; Paul Gotthelp Kummel, of Leipzig; Charles Frederick Enoch Richter, of Leipzig; and Frederick Christian Guillaume Vogel, of Leipzig, representing booksellers from all parts of Germany. The memorial was well received by the Congress, and the act for the federal constitution of Germany, Article 18, provided "that the Diet should consider the measures to be taken, in order to guarantee authors and editors against the piracy of their works."

in the same manner as the republication or piracy of a work of the same nature first published in such other country. Such protection is extended to translation also, authors being allowed to reserve the right of translation for five years, on condition of registration and deposit in the country within three months after the first publication, notification on the title-page of the intention to reserve the right of translation, the actual appearance of a part of the authorized translation, within a year after registration and deposit of the original, and within three years after the date of such deposit. If such international conventions are needful and beneficial as between countries where difference of language would, under any circumstance, form a natural barrier to piracy, the advantages would be immensely greater as between two nations like England and the United States, having the same language and literature; and it is much to be lamented that either from mutual misunderstanding in the matter, or from narrow and unworthy motives among any section of either community, such compact has not yet been concluded, and the subjects of either state are left at liberty to pirate the literary production of the other. What reasons have been adduced for such an anomaly? England is ready to enter into a treaty of international copyright with the United States. Why do the United States object to enter into such an agreement? It would not be one-sided; it would be mutual. If British publications are useful in the United States, so United States writers find readers not a few in the United Kingdom. In law, America is a great school. Kent, Story, Halleck, and Wheaton, and many of the best reports of the United States courts, fill the shelves of Lincoln's Inn; Bancroft, Irving, Prescott, Motley, Cooper, Hawthorne, and Edgar Poe, Channing, Parker, and Emerson, Bryant and Longfellow, are probably as well known in England as in the United States; and Mr. Stevens tells us that in the British Museum there is a larger and more complete collection of American authors than are to be found even in the United States. Would it not be as good for America to secure protection for her works here as for England to secure protection for her books in the United States? In the interest of litera-

ture, in the interest of fairness and honesty, a mutual compact like that proposed is just and proper.

A portion of American publishers have hitherto opposed international copyright on various grounds. They allege that it would tend to diminish the popular sale and circulation of books by raising their prices; that a foreign author has really no claim to a monopoly in every land where his work may be printed; that international copyright would have the effect of enhancing the price of books of foreign authorship in the American market, and would probably even tend to increase the price of American copyright books; that one of the effects of international copyright would be to repress the popular circulation of literary and scientific works; that such a measure would not promote the progress of science and the useful arts among the American people; that no form of international copyright can fairly be urged upon Congress on reasons of general equity or of constitutional law; that the adoption of any plan for the purpose would be of doubtful advantage to American authors as a class, and would be not only an unquestionable and permanent injury to the manufacturing interests concerned in producing books, but a hindrance to the diffusion of knowledge among the people, and to the cause of universal education; that no plan for the protection of foreign authors has yet been devised which can unite the support of all, or nearly all, who profess to be favorable to the general object in view; and that any project for an international copyright will be found upon mature deliberation to be inexpedient.

We do not question the right of the United States to look well to the economic bearings of the question; but there are points of morals and justice which have their weight. As it is, the United States respect the literary property of their own citizens, but do not respect that of the subjects of other countries. Producing but little themselves,<sup>1</sup> especially in works of a

<sup>1</sup> The *Publishers' Circular* showed that in the United Kingdom in 1877 there were published 3049 books, including American publications. The American publications numbered 481, or a proportion of 15.77 per cent. In 1869 the total number of new books published in the United Kingdom was 3253, and the number of American publications 397, or 12.20 per cent. In the same year, 1869, there were published in the United States of America 1680 original works, and 367 were English reprints and 119 Continental translations; total, 486,

scientific or technical character, and finding that they can easily avail themselves of the rich products of British mind in their own vernacular, they refuse to be trammelled by any obligation to remunerate British authors for the same. Honorable men there are among them who would scorn using to their advantage that which they have not *bona-fide* acquired. Evidence was given before the Copyright Commission that Sir Charles Lyell received considerable sums from America, and that Mr. Darwin is able to make satisfactory arrangements there; whilst Mr. Murray stated that he succeeded in getting £1000 thence for the Livingstone family. But these are exceptions, which only prove the rule—a rule which is evidently wrong and unfair. See, however, how it works. The commissioners reported that firms of eminence in the United States, rivalling each other in the effort or scramble to secure early sheets of important works, have been driven to come to an understanding among themselves to recognize the priority of right to republication of a British work in any one who can secure priority of issue in the United States. In other words, they have agreed among themselves that the first successful importer shall be the recognized proprietor. But to secure the prize American publishers are obliged to offer liberal compensation to British authors of important works for early or advance sheets, as they are called; by such method British authors reap substantial benefits, and so far the evil corrects itself; only it is a clandestine method, which does not admit of defence. Nor is it a proper reason for refusing to enter into an international copyright convention, that American publishers do not require the benefit of reciprocity, since American authors can first publish their works in England to take the benefit of British copyright, and then republish them in the United States, and obtain copyright there also.

or in the proportion of 28.98 per cent, America being thus indebted to England and the Continent for nearly twice the number of books she is able to send to those countries. Comparing the number of books published in the United Kingdom and the United States of America, according to different classes of literature, it appears that whilst in England more than a fifth of the whole were works on theology, in the United States not more than one eighth of the whole. On the contrary, while in the United States 20 per cent of all the books published were on fiction, in the United Kingdom the proportion was only 9 per cent.

In truth, there is no justification whatever for the denial, and the question resolves itself into one of simple honesty and justice, as well as of sound commercial principles. It has been suggested that a mixed commission should be appointed by the Governments of Great Britain and the United States, to arrange terms for a copyright convention which may be mutually acceptable. By all means let this be done; but we imagine public opinion in the United States must become sounder and more reasonable, before any such commission can succeed. The imperial mode of dealing exhibited by Napoleon III. in the conclusion of a treaty of commerce with the United Kingdom, and by Great Britain in her recent Anglo-Turkish Convention, will not succeed in the United States of America.

To certain conditions imposed for the exercise of copyright considerable objections have been raised. The presentation of a certain number of copies to the public libraries of every work, however expensive, is a charge justly resented. In England, a printed copy of the whole of every book published, with all maps, prints, or other engravings belonging thereto, and also of any subsequent edition, with any addition or alteration, upon the best paper, must be delivered for the use of the British Museum within one calendar month after the publication—that is, after the day on which such book is first sold, published, or offered for sale—if in London, or within three months if published in any other part of the United Kingdom, or within twelve months when published in any other part of the British dominion. And another copy of such books must also, on demand in writing, be delivered, within twelve months after the publication thereof, to the officers of the Stationers' Company for the following libraries, viz., the Bodleian Library at Oxford, the Public Library at Cambridge, the Library of the Faculty of Advocates at Edinburgh, and the Library of Trinity College at Dublin. And if any publisher neglect to deliver such copies he forfeits, besides the value of the copies of such books, a sum not exceeding five pounds, to be recovered by the librarian or other officers of the library in a summary way. It is impossible to overestimate the importance of securing a national collection of every literary work, and for that purpose, as well as an evidence of publication, the deposit of a single

copy in a public library may be advantageously demanded. Would indeed that by any means a complete collection of every work printed and published could be secured ! It would be worth any sacrifice. No such plea, however, can be made on behalf of more than one national library. Yet to this day the British Exchequer pays yearly upwards of £3000 to the Universities of Aberdeen, St. Andrews, Edinburgh, and Glasgow, the King's Inn Library, Dublin, and Sion College, London, for compensation for the withdrawal of similar privileges from them under the Copyright Act. Could their privileges be justified ? Certainly not ; nor would there be any reason for the award of similar compensations to the other libraries which still possess the rights to copies of every published work. The universities of the kingdom are otherwise assisted by the state, and the Faculties of Advocates can well provide for their own libraries.

The condition of registration and payment of fees is also a ground for complaint. As it is at present, a book of registry for the proprietorship in the copyright of books and assignment thereof is kept at the Stationers' Hall, and the proprietor of copyright of any book may make entry on the registry of the title of the book, the time of the first publication, the name and place of abode of the publisher and of the proprietor of the copyright of the book, or of any portion of such copyright, upon payment of 5s. to the officer of the company. And every such registered proprietor may assign his interest, or any portion of it, by making entry in the book of registry of such assignment, and of the name and place of abode of the assignee, on payment of the like sum. It is a matter of fact, however, that though almost every book contains the words "Entered at Stationers' Hall," only a small proportion of the books published are so registered ; the reason for the neglect being, that registration serves no practical purpose, that it is too indefinite to be of any use as to the extent or duration of the copyright, that it is not of itself a conclusive evidence of title, and that it is not sufficient to prove that the book registered was actually written by the person who registered it, or that it is not a piracy. The fee also is too high. If copyright is to be maintained, some kind of registration is absolutely necessary ; but it is scarcely desirable to maintain the same in the hall

of a company almost effete, whose very existence is almost unknown, and whose functions have been quite superseded by modern appliances. The Copyright Commissioners reasonably recommended the combination of registration with the deposit of the book at the British Museum—a method which, whilst it would diminish labor and expense, would relieve that institution of the labor of hunting for books in booksellers' catalogues and advertisements. The registration would be effected by a registrar appointed for that purpose, whose duty would be to receive the copy of the book, to register the official receipt, and to give a copy thereof, certified by him to the person depositing the book, and the certified copy would be a *prima facie* evidence in courts of law of the publication and due registration of the work, and of the title to the copyright of the person named therein. A fee of one shilling would, in the opinion of the commissioners, be ample, if registration were made compulsory, to render the registration self-supporting. How far the registration of a book should involve the forfeiture of the copyright is a grave question. The recommendation of the commissioners, that proprietors of copyright should have no right to maintain any proceeding in respect of any thing made or done before registration, or in respect of any dealing subsequent to registration with things so made or done before registration, seem somewhat harsh and unreasonable. Would it not be sufficient to make non-registration penal, especially as this technicality has hitherto been so largely disregarded? The commissioners did not recommend the registration of paintings and drawings, so long as the property in the picture and the copyright of the same are vested in the same person, but that once the copyright is separated by agreement from the property of the picture, registration shall become necessary.

Registration and deposit as an evidence of copyright affect also international copyright, and they are the more irksome inasmuch as they touch persons residing in foreign countries and unacquainted with the laws of other countries. The French Government suggested that it should be sufficient for an author to comply with the laws of his own country. In the case of Belgium, with which France has concluded a convention on international copyright, French authors are authorized to

register, without deposit, their works at the office of the Belgian Legation in Paris. And this simple method should be pursued in every country. The commissioners proposed that registration of foreign works in England should no longer be required for the purpose of securing copyright there. The production of a copy of the foreign register, attested by a British diplomatic or consular officer, should be sufficient as a *prima facie* evidence of title to the copyright of the foreign work. Also, that the obligation to deposit copies of foreign books, and other works for which authors may desire to obtain copyright in the British dominion, be also abandoned. The period fixed for translations under the copyright convention is proposed to be prolonged from five to ten years; and the right of translation and adaptation of dramatic pieces as well as the right of performance, are recommended to be placed on the same footing as the right of translations of literary works.

A few words on the infringement of copyright must suffice, for the question is one of jurisprudence rather than legislation. It should be remembered in relation to infringement, that plagiarism does not necessarily amount to an invasion of copyright, and that the author of a published work has no monopoly in the theories or speculations, or even in the results of observations therein stated, although no one, whether with or without acknowledgment, is permitted to take a material and substantial portion of the published work of another author for the purpose of making or improving a rival publication. What is an infringement of copyright is in every case one of considerable nicety. Mr. Justice Story, in his decision on Emerson's "North American Arithmetic," said: "The differences between different works are often of such a nature, that one is somewhat at a loss to say whether the difference is formal or substantial. In many cases the mere inspection of a work may at once betray the fact that it is borrowed from another author, with merely formal or colorable omissions or alterations. In other cases we cannot affirm that identity in the appearance or use of the materials is a sufficient and conclusive test of piracy, or that the one has been fraudulently or designedly borrowed from the other. In truth, in literature, in science, and in art there are and can be few if any things which in an abstract sense are

strictly new and original throughout. Every book in literature, science, and art borrows, and must necessarily borrow and use, much which was well known and used before. No man creates a new language for himself ; at least, if he be a wise man, in writing a book he contents himself with the use of language already known and used and understood by others. The thoughts of every man are more or less a combination of what other men have thought and expressed, although they may be modified, excelled, or improved by her own genius or reflection. If no book would be the subject of copyright which was not new nor original in the elements of which it is composed, there could be no ground for any copyright in modern times, and we should be obliged to ascend very high, even in antiquity, to find a book entitled to such eminence. Virgil borrowed from Homer ; Bacon drew from earlier as well as contemporary writers. Coke exhausted all the known learning of his profession ; and even Shakespeare and Milton, so justly and proudly our boast as the brightest originals, would be found to have gathered much from the abundant stores of current knowledge and classical studies in their days. What is La Place's great work but the combination of the processes and discoveries of the great mathematicians before his day, with his own extraordinary genius. What are modern law books but new combinations and arrangements of old materials, in which the skill and judgment of the author in the selection and exposition and accurate use of those materials constitute the bases of his reputation as well as of his copyright ? Blackstone's Commentaries and Kent's Commentaries are but splendid examples of the merit of such achievements. In truth, every author of a book has a copyright in the plan, arrangement, and combination of his materials, and in his mode of illustrating the subject, if it be new and original in its substances. . . . He who constructs, by a new plan and arrangement and combination of old materials, a book designed for instruction, either of the young or of the old, has a title of copyright which cannot be displaced by showing that some part of the plan or arrangement or combination had been used before. The true test of what is or is not piracy is to ascertain whether the plan, arrangement, and illustration of the original work have been

used as the model of the new book, with colorable alterations and variations only to disguise the use thereof ; or whether the new work is the result of the writer's own labor, skill, and use of common materials and common sources of knowledge open to all men, the resemblances being either accidental or arising from the nature of the subject."

The space we have devoted to literary property does not permit us to enter at length on property in inventions. The subject is too important, however, to be altogether omitted. Whilst industry was despised as in Greece and Rome, whilst manual labor was regarded with aversion and prejudice, as degrading to man and unworthy of a citizen, we could not expect inventions to be rewarded. It was not till labor became emancipated, and industry was recognized as an element in the promotion of wealth, that the right of inventors to recognition and reward was admitted. England was the first in providing for it, though the statute of James in 1623 was only a protest against the abuse of monopolies. The United States came next, in 1787, by recognizing the right of inventors expressly in their Constitution; and immediately after came France, in 1791, when the Constituent Assembly passed a law upon the subject, the preamble of which was, " The National Assembly, considering that every new idea, the manifestation or development of which may be useful to society, belongs primarily to him who conceived it, and that it would be attacking the rights of man in their essence not to regard an industrial discovery as the property of its author." We shall not revert to the interesting question of the natural right of inventors. The patent law, still more than the law of copyright, has been the subject of keen controversy. It is objected to patents that they afford a very unsatisfactory stimulus to invention, the advantage reaped by inventors being obtained at a frightful cost to the country ; that whilst the best stimulus to invention is natural competition, patent laws destroy that competition ; that it is no part of the state to stimulate or reward invention, the true function of the state being to protect, not to direct, the increase of human energy ; that patent laws have become a cause of embarrassment and an obstruction to progress ; that they produce a similar influence as a lottery ; and that many most meritorious in-

ventors under the present patent law are utterly ruined. It is clear, on the other hand, that but for security against piracy, inventions would not be made known ; that it is the expectation of deriving remuneration which acts as the main incentive to the exercise of ingenuity ; and that if it be just to secure a reward to inventors in consideration of the great benefit they confer upon mankind, it would be difficult to find a kind of reward on the whole more advantageous to the inventors and the public than the concession to them for a limited time of the exclusive benefit of the invention, however it may turn out. The policy of the patent law was inquired into by a committee of the House of Commons in 1872, and after giving to the whole matter the most careful attention, the report was to the effect that the privilege conferred by patents promotes the progress of manufactures, by causing many important inventions to be introduced and developed more rapidly than would otherwise be the case ; that the same privilege leads to the introduction and publication of numerous improvements, each of a minor character, but the sum of which contributes greatly to the progress of industry ; that, in the absence of the protection of letters-patent, the competition of manufacturers among themselves would doubtless lead to the introduction of improved processes and machinery, but that it would probably be less rapid than under the stimulus of a patent law ; and that it does not appear that the granting of pecuniary reward could be substituted with advantage to the public interest for the temporary privilege conferred by letters-patent. Still more recently, an international patent congress was held at Vienna, on the occasion of the international exhibition, and the conclusions arrived at were, that protection of inventions should be guaranteed by the laws of all civilized nations, because the sense of right among civilized nations demands the legal protection of intellectual works ; because such protection affords, under the condition of a complete specification and publication of the invention, the only practical and effective means of introducing new technical methods, without loss of time and in a reliable manner, to the general knowledge of the public ; because the protection of invention renders the labor of the inventor remunerative, and so induces competent men to devote

time and means to the introduction and practical application of new and useful technical methods and improvements, and attracts capital from abroad, which, in the absence of patent protection, would find means of secure investment elsewhere; because by the obligatory complete publication of the patented invention the great sacrifice of time and of money, which the technical application would otherwise impose upon the industry of all countries, is considerably lessened; because by the protection of invention, secrecy of manufacture, which is one of the greatest enemies of industrial progress, loses its chief support; because great injury would be inflicted upon countries which have no patent laws, were native inventive talent to emigrate to more congenial countries, where their labor is legally protected; and because experience shows that the holder of a patent will make the most effectual exertions for a speedy introduction of his invention. Patent laws are enacted in almost every civilized state. In Austria, a patent is granted for each new discovery, invention, or improvement, and it extends over the entire Austrian Empire, for a period of fifteen years. The patent is granted only to the inventor or his accredited agent, and for an invention not in use within the empire. In Belgium, the patent is granted for twenty years to the inventor who obtains a patent before obtaining a patent for any other country. If a patent has been first obtained in any other country, the term of the Belgian patent would be the same as the term in that country. In Germany, patents are granted for new inventions, the application being submitted to examination, for a period of fifteen years. If the patent be obtained by fraud, or by a stranger not having a representative in Germany, the patent is forfeited. In France, a patent is only applicable to discoveries relating to industrial art, and is granted for fifteen years. In Denmark, important inventions are protected for ten years, though usually a patent runs for three, four, and five years. In the Netherlands, by a law of 1870, no fresh patents for inventions or improvements were to be granted. In Switzerland, no special laws exist for the encouragement and protection of inventors. Public opinion in the Confederation is opposed to the patent law, the accepted theory being that inventions should be considered as common property. In the United Kingdom,

patents are granted for fourteen years, subject to the payment of certain fees and stamps at the expiration of three and seven years respectively ; and in the United States of America patents are granted for seventeen years. In some countries, the patent is granted as of course, if the formal procedure be complied with. In others, the patent is granted upon and after previous inquiry. In some countries patents are granted to the inventor only ; in others, to the first importer, also without reference to his being the inventor. But nearly all civilized states have laws for the furtherance of art and industry, and there is no reason why they should be assimilated.

How far patent laws have contributed to the present wonderful progress of art industry, is extremely difficult to say. Doubtless some of the most remarkable inventions have been made without any patent to foster them. Paper, glass, gunpowder, printing, and a hundred more inventions were made when no reward or monopoly was at hand. Nevertheless, it is a matter of common experience that progress has been more rapid and thorough in modern times, and under the régimes of the patent laws, than was the case at any former period. What is wanted is a little more care in the granting of patents, a little more sifting of inventions, a little more regard to their utility. If the patent law is to be a stimulus to invention, the fees should not tend to discourage the poorest from availing himself of it. Whilst we must protect the public from being cumbered by a multitude of useless patents, which narrow the field of industry, we must smooth the path for the protection and encouragement of really useful inventions. We must give to foreign inventors the same right as to native inventors to come to our courts for their patents, and to ask for full protection against their infringement ; and there is no reason why international conventions may not be concluded for the exercise of the rights of invention, in the same manner as in the case of copyright and trade-marks.

We plead for the full recognition of literary and industrial property in all its forms and manifestations. We plead for the right of an author, an artist, an inventor, to the fruit of his labors. We ask that the law everywhere may protect the property of the mind, whether applied to the transformation of

matter, or to letters and art, as it protects real and movable property. Profoundly indebted to those master minds who contribute to the progress of science and art, to the advancement of learning, and to the expansion of human knowledge, we ask that their rights to substantial reward may be recognized and conceded. All *bonâ-fide* workers in the vast field of literature, science, art, and industry have a right to the gratitudo of every well-wisher of human progress, and we trust the time will soon come when, in respect of their works, they will be acknowledged, as they truly are, the citizens of the world. If we must limit copyright and patent in matter of time, there is no reason for their limitation in matter of space. A liberal code should concede the right of literary, artistic, and industrial property, in whatever form, to authors and inventors, whatever their nationality, and international conventions should exist among all civilized states for regulating the exercise of the same.

LEONE LEVI.

## MAN'S PLACE IN NATURE.

THERE are two widely different views in regard to man's relation to and his place in nature, the difference depending wholly upon the standpoint of the observer. From the material or *animal* point of view, man is very closely connected with and forms a most insignificant part of nature ; from the spiritual or *moral* point of view, he belongs to a wholly different and far higher plane of existence. From the former point of view, it is impossible to exaggerate the closeness of his connection and the insignificance of his place. He has no kingdom of his own ; he belongs to the *animal* kingdom. In that kingdom he has no department of his own ; he belongs to the department of Vertebrata along with birds, reptiles, amphibians, and fishes. In that department he has no privileged *class* of his own ; he belongs to the class Mammalia along with all four-footed beasts. In that class he has no titled *order* of his own ; he belongs to the order of Primates along with apes, baboons, lemurs, etc. Even the privacy of a *family* of his own, the Hominidæ, is grudgingly accorded him by some. But from the spiritual point of view it is simply impossible to exaggerate his importance or the wideness of the gap which separates him from even the highest animals. From this point of view man must be set over as an equivalent, not only against the whole animal kingdom, but against all nature besides. From this point of view, as we shall see, nature may be said to exist only for man—nature the matrix, man the offspring. From this point of view the difference which separates man from the highest ape is far greater than that which separates the latter from the lowest moner. In fact, the former difference is incommensurable in terms of the latter.

Now, while all writers recognize these two points of view, yet most of them dwell almost wholly on one or the other, the one chosen being determined by the habits of thought. Thus physiologists, habitually insisting on the closeness of the connection, almost ignore the infinite distinction ; while the psychologist and the theologian, ever insisting on the wide distinction, seem almost to forget the close connection. It is needless to say both views are correct, but it is evident also that the latter is the more important and significant. Both contain important truth, but the latter contains the higher and the more important. Both points of view are necessary to a just appreciation of the nature of man, but the latter only is the truly and distinctively *human* point of view.

By man's place in nature, therefore, I mean especially the place of man's spirit ; for it is this alone which so widely distinguishes him from other creatures. There can be no important question raised as to the relation of man's *body* to nature, or at least no question at all equivalent in importance to the other. Man's *body* is identified with all nature as to its *chemical constituents*, with the body of all animals as to its *functions*, and with that of mammalian vertebrates as to its *structure*. When we say that he is related to other species of mammals precisely as these are related to each other ; when we say that bone for bone, muscle for muscle, ganglion for ganglion, almost nerve-fibre for nerve-fibre, his body corresponds with that of the higher mammals ; when we say that, whether it came by natural process of genesis from that of lower animals or not, the structural similarity is precisely such as would be the result of such an origin, so that we may easily conceive how one may have come from the other by successive modification —that whatever gap now exists between man's body-structure and that of the higher mammals may be easily and plausibly filled in imagination by an uninterrupted series of links ; when we say all this, we have said nearly all that is of general philosophic interest on the subject. But in regard to the spirit of man the case is far different. Here the gap between man and animals is simply infinite ; for the difference is not only one of degree but also of *kind*, and therefore incommensurable in terms of degree. Here we are dealing with two entirely

different planes of existence. Here, therefore, is a question of prime importance. Is the spirit of man related or unrelated to nature? If related, what is the character of that relation? What is the place of man's spirit in the scheme of nature? What is its relation to the *anima* of sentient nature, the *vital force* of living nature, and the *chemical and physical forces* of dead nature?

In order to make clear my views on this most difficult subject, I will endeavor to lead up to them by some preliminary reflections.

1. *The Distinction, Matter and Force.*—Many modern philosophers object to the use of the distinction, matter and force. I believe the distinction not only necessary but fundamental. There is a fundamental and irreconcilable antithesis in human philosophy which meets us on every side and is evidently the result of the limits of human thought. In the language of general philosophy it is expressed by the terms phenomena and cause; in the language of science as matter and force; in the language of psychology, matter and spirit; in the language of theology, Nature and God. These are fundamentally antithetic. The one is revealed in *sense*, the other is revealed only in *consciousness*. For we never could have any idea of cause or force if we were not intensely conscious of being ourselves a force determining change. Phenomena would succeed each other in endless succession; we might study and determine the laws of their sequence, but the idea of any causal or kinetic nexus between would never enter our minds were we not conscious of *will* as a force and a cause of phenomena. If it be objected that sense is also change in consciousness, and therefore that matter is also revealed there, I answer if matter be revealed in consciousness, then force and cause is revealed in *reflection* on the facts of consciousness; if matter be revealed in consciousness, then is force and cause revealed in *self-consciousness*—the former in the *outer*, the latter in the *inner* circle of consciousness.

Of these two, a pure materialism empties existence of the one, a pure idealism of the other; but common-sense and rational philosophy must and will have both, even though they cannot comprehend their mutual relations. These two terms

represent the opposite poles of human thought and human philosophy, and therefore, for us at least, the opposite poles of existence. As electricity consists of two opposite and mutually destructive yet mutually dependent principles, positive and negative, which cannot manifest themselves except in the presence of each other, and yet are inoperative unless distinct ; as magnetism, too, consists of two opposite and mutually destructive yet mutually dependent principles, north-polar and south-polar, which are operative only when both are present, yet distinct ; even so human thought becomes productive in philosophy and in science only as it separates and distinctly recognizes those two opposite principles.

So much it was necessary to say in order to justify my use of the terms matter and force, matter and spirit, etc. It has become the fashion in these modern times and among modern materialists to identify these opposite principles—to say that they are only *two sides* of one fact. Be it so ; it can make no difference to *us*, so long as *we* cannot understand the connection between the two sides—so long as they are eternally distinct to *us*.

2. *Different Planes of Matter and Force and their successive Evolution.*—Matter may be said to exist on several planes raised one above another. These are : 1. The plane of chemical *elements* ; 2. The plane of chemical compounds, or mineral kingdom ; 3. The plane of plant life, or vegetable kingdom ; 4. The plane of sentient life, or animal kingdom ; 5. The plane of moral life, or human kingdom. Some may object to this last, but I hope to show its relation to the others in the sequel. Now, there is a peculiar form of force associated with and characteristic of each of these planes, and whose function alone it is to raise matter to that plane and to execute all the movements thereon. Thus physical force alone acts or can act on the first plane, that of elements for the action of chemical force at once raises matter to the second—viz., compounds. It is the distinguishing prerogative of chemical force to raise matter from the first to the second plane, and to execute all the movements (*i.e.*, produce the phenomena) on the latter, the study of which together constitutes the science of chemistry. It is the prerogative of the vital force of plants alone to raise matter from the second

plane to the third, and to execute all the movements on the latter, the study of which constitutes the science of vegetable physiology. Similarly it is the prerogative of the vital force of animals (sentient force) alone to raise matter from plane No. 3 to plane No. 4, as well as to execute all the complex movements on the latter, the study of which constitutes the science of animal physiology. But no power in nature is capable of raising matter at one step from No. 1 to No. 3, or from No. 2 to No. 4, without passing in orderly succession through the intermediate planes, and, as it were, resting and receiving new impulse, new accession of force and of a different kind, there. Plants cannot feed on and assimilate elements, but only matter on the plane immediately below—viz., compounds; nor can animals assimilate inorganic compounds—minerals—but only matter on the plane immediately below—viz., plants. The reason of this remarkable and very significant fact cannot be explained here. I have attempted to explain it in my article on “Correlation of Vital with Physical and Chemical Forces,”<sup>1</sup> to which, therefore, I would refer the reader.

What is true of matter must, *a fortiori*, be true also of the associated force; for the elevation of matter is determined by the force. Force also, therefore, is transmuted into higher and higher forms only in orderly succession. No link must be missing; the ladder must be scaled round by round. Thus, for example, on the lowest plane there operates only physical force and occur only physical phenomena; on the second plane, in addition, also chemical force and its associated phenomena; on the third plane, in addition to both the preceding, also the force and the phenomena characteristic of plant life; on the fourth plane, in addition to all the preceding, also the force (nerve force) and the phenomena characteristic of sentient life. Thus the condition of matter and the form of force rise, and the complexity of phenomena increases, all in an orderly manner.

But if this be the law of the transmutation and successive elevation of matter and force *now*, the same must also have been the law of the first appearance or evolution of the different planes of matter and forms of force. There can be no doubt,

<sup>1</sup> *Popular Science Monthly*, Dec. 1873; also Appendix to Stewart’s “Conservation of Energy,” International Series of publications.

therefore, that in the evolution of the cosmos there was the same orderly ascent of matter and force, and the same increasing complexity of the associated phenomena.

But (and this is the most important point) the ascent of matter and of force, though in orderly succession, is *not by infinite gradation*, is not by sliding scale, but always *by paroxysms*; and therefore are the several conditions of matter and force properly represented, not by an ascending inclined plane, but by a series of platforms raised one above another, with blank spaces between. Thus, to illustrate, when the elements oxygen and hydrogen unite, they do not merely mix and form a substance of intermediate properties; on the contrary, they disappear with all these properties as elements, and suddenly reappear as the chemical compound, water, with entirely new and unexpected properties. Whenever the right conditions are present, they rise suddenly from one plane to another. They are changed in the twinkling of an eye. It is a sudden birth into a higher condition with new properties and powers, which could not have been imagined before. So, also, when carbonic acid and ammonia ( $\text{CO}_2 + \text{H}_2\text{N}$ ) are brought together under appropriate conditions—viz., in the presence of sunlight and the green leaves of plants—they unite and rise at one step into another totally different and far higher condition of matter—viz., living matter, endowed with entirely new and unexpected properties and powers. It is again a new birth of matter into a higher plane of existence: old things have passed away, all things have become new. In similar manner, under appropriate conditions, characteristic nerve-phenomena—sensation, consciousness, will—spring suddenly into existence as by birth; not only without gradation, but gradation in this case is simply inconceivable, for no one can even think sensation, consciousness, and will in terms of material phenomena—*i.e.*, in terms of motion.

The same is true also of force; and must be, for it is the form of force which determines the plane of matter and the different grades of associated phenomena. Physical is changed into chemical force, heat or electricity into chemical affinity, not by sliding scale of infinite gradations, but suddenly whenever the conditions are right; chemical is transmuted into vital

force, not by sliding scale, but at one step—a very long one—when the necessary conditions are present.

This is true of both matter and force *now*. Is it not fair to conclude that the same is true for all time? Therefore, in the evolution of the cosmos the different forms of force and conditions of matter, with their associated phenomena, appeared, when the necessary conditions in each case were present, suddenly, by a succession of births into higher and still higher planes.

3. *Assimilation of Matter and Force*.—There is one very important and significant condition of the origin of the higher forms of matter and force not yet mentioned. Vital is transformed into chemical force; true, but the necessary and very peculiar condition of this transformation is the presence also of *living matter*. Now it is impossible to overestimate the philosophic significance of this last condition. The change from one form of physical force to another, or from physical to chemical force, takes place when appropriate *physical* conditions only are present; but in the case of the higher force, *life*, not only are certain physical conditions necessary, but also one other very characteristic super-physical condition—viz., the presence then and there of previously formed *vital force*. To illustrate: As certain elements brought together under appropriate physical conditions, such as light, heat, electricity, unite and rise into the second plane—*i.e.*, of chemical compounds; so certain chemical compounds, under appropriate physical conditions, light, heat, and chlorophyl, unite and rise into the third plane—viz., of organic matter. In both cases there is chemical union under certain physical conditions; but in the latter case there is one wholly unique condition—viz., the presence then and there of previously existing organic living matter, under the guidance of which the transformation of matter takes place. Organic matter is necessary to produce organic matter, living matter to produce living matter. It is a law of like producing like; it is an *assimilation* of matter. Or, again, as physical force changes into other forms of physical force, or into chemical force, under certain physical conditions, so also chemical force is changed into vital force under certain purely physical conditions. But in this latter case there is, in addition, one wholly unique con-

dition—viz., the presence then and there of previously formed vital force, under the guidance of which the transformation of force seems to take place. Life-force is necessary to produce life-force. It is, again, like producing like ; it is an *assimilation of force*.

Assimilation, then, is characteristic of living matter and of life-force, and the very term expresses the previous existence then and there of *like* form of matter and force. Therefore, while it is easy to conceive of the *first origin* of all the different forms of physical and chemical forces from one primal force—viz., attraction, it is manifestly impossible to conceive of the first origin of organic matter and life-force by any known natural process ; for, as we have seen, one of the necessary conditions of its formation from lower forces (and there is no other natural process) is the previous existence of the very thing to be formed. The same is, *a fortiori*, true of still higher forms of matter and force—viz., of rational and moral forces characteristic of man. The successive births of force into higher and higher forms are more and more difficult to imagine as the pure result of natural processes.<sup>1</sup> It is of course possible (and science must ever incline to believe) that the origin of life and reason may have been the result of some now unimaginable physical conditions present in the earlier stages of the earth's evolution ; but let us at least frankly acknowledge the insoluble mystery—let us, for the present at least, place it alongside of that deepest of mysteries, the mystery of creation—*i.e.*, of the first origin, not of the forms of matter and force, but of matter and force itself.

The facts just mentioned bring into strong light the scientific reasonableness of Mivart's views on the theory of evolution. According to Mivart we must make a distinction between the *enactment* of a law and the subsequent normal *operation* of the law—between the first introduction of a force and

<sup>1</sup> It will of course be objected by some that this argument assumes the impossibility of spontaneous generation, a point still in dispute. To such I would answer that not only is the evidence overwhelmingly against spontaneous generation, but that even if such generation were proved, still the question of first origin of life is not touched ; for all the experiments in spontaneous generation commence with organic matter ; but organic matter as well as life-force is the very thing to be accounted for.

the subsequent regular operation of that force. The former he regards as a direct act of the divine will ; the latter as the indirect operation of the same will acting uniformly through secondary agencies. Thus physical and chemical forces introduced in the beginning by direct act ever afterwards operated in a regular way, changing their form and producing thereby an infinite variety of phenomena. Then, when the time was ripe, vital force was similarly introduced by direct act, and, ever afterwards operating through the laws of evolution, produced all the infinite variety of organic forms, including the body of man himself. Finally, in the fulness of time, the immortal spirit of man was produced by direct act, and then left to work out, or at least to co-operate in working out, its own evolution to higher and higher forms of society, government, religion, and science.

Now, in so far as this view expresses the suddenness of the change from lower to higher forms of force, and therefore of the first appearance of these higher forms, it is certainly true ; and in so far as it expresses the necessity of other than purely physical conditions for their generation by transmutation at the present time, and therefore presumably in their first origin, it is also probably true. It may be said, therefore, to express the present condition of science ; but who shall say that it expresses the final condition ? The domain of science is secondary causes. By virtue of her very mission, she must ever strive to extend her domain, and therefore to remove as much as possible the miraculous from the realm of nature. She ought not to be blamed for this, but rather encouraged. In regard to the point in question, she must and ought to ever strive to understand and, if possible, to reproduce the conditions under which life originated on the earth ; she must and will ever strive to understand and explain, by the operation of secondary causes, the still more difficult problem of the first origin of reason. But let it be borne in mind (and this is the most important point for us in this discussion) that whether the process be understood or not, whether it be a natural or a supernatural process, whether we find it necessary, in order to account for the first introduction of life and reason, to call in the aid of a direct act of the divine will or not—in any case this introduction comes now—*i.e.* in the origin of the individual, and therefore has come in the origin

of the race, by *transmutation from lower forces*, and therefore may legitimately be called a process of evolution. As such, therefore, we shall speak of it. This brings me naturally to the last of these preliminary reflections.

4. *Evolution of the Organic Kingdom.*—As I shall be compelled to use the term evolution frequently in the course of this article, and as, in fact, the whole discussion of the subject of the article will proceed from this standpoint, it is necessary that I should define my position on this modern theory, and especially that I should explain the sense in which I use the term.

Evolution is certainly the grandest idea of modern science, embracing alike every department of nature. *The law of evolution is as universal as the law of gravitation. The one is the universal law of time, as the other is of space.* In its widest and truest sense, evolution constitutes the subject-matter of at least one half of all science. I stop a moment to enforce this point, because the scope of evolution is much misunderstood, the name having been monopolized by one form only—viz., that of the organic kingdom, and even here restricted to certain views.

Every system of related parts may be studied from two distinct points of view, which may be compendiously distinguished as *static* and *dynamic*; the latter I call evolution. Such a system, for example, may be studied, in the mutual relation of its parts, as to changes *within* the system, by action and reaction producing perfect equilibrium, stability, interior harmony—statics; or the same may be studied, as to progressive change in the whole system, by continuous movement of its point of equilibrium—by continuous disturbance and readjustment of its stability on a higher plane—dynamics or evolution. Thus the human body may be studied in the beautiful action and reaction of its various organs producing perfect equilibrium, stability, health: this is statics, physiology. Or the same may be studied as growing and developing to higher and more complex equilibrium by continuous disturbance and readjustment on ever higher planes: this is dynamics, embryology, evolution. Again, society may be studied in the harmonious action and reaction of its parts or social organs, producing social health, happiness, prosperity, good government, stability: this is social

statics, social physiology. Or the same may be studied in its onward movement as a developing organism by the continuous disturbance of equilibrium and its readjustment on a higher plane : this is social dynamics, progress, evolution. Again, the earth may be studied in the mutual relation and the action and reaction of air, water, land, winds, currents, and the resulting climates : this is terrestrial statics, physical geography. Or the same may be studied in the gradual progressive changes which all these have undergone by disturbance of old relations and readjustment of new and higher equilibrium : this is terrestrial dynamics, physical geology, evolution. Again, the solar system, or even the stellar system, may be studied in the beautiful relation of its parts, by action and reaction producing exquisite harmony and perfect stability : this is cosmic statics. Or the same may be studied in its progressive development through infinite time, the relations changing, the equilibrium disturbed, at every moment only to be readjusted more perfectly in a higher condition : this is cosmic dynamics, evolution. So also, and finally, the organic kingdom, taken as a whole, may be studied in the mutual relation of plants and animals, and of the various classes and orders of these to each other, and of all these to soil, climate, and other physical conditions (environment) producing equilibrium, stability, and permanency of form : this is usually treated under geographical distribution of species, but is really a science which yet has no name. Or the same may be studied in the progressive change in all its parts and in all its relations, through all time, by continuous disturbance and readjustment of equilibrium to higher and higher conditions : this is evolution.

I repeat, therefore, that evolution, in its widest and truest sense, is a grand fact, embracing every department of nature and constituting one half, and that the larger and more complex half of all sciences. Now, in this wide sense there can be no doubt of the evolution of the organic kingdom. There may be, and in fact there is, much difference of opinion as to the *causes* or *factors* of evolution—there may be, and in fact there is, much difference of opinion as to the *rate* of evolution, whether always uniform or often more or less paroxysmal ; but of the *fact* of progressive movement of the whole organic kingdom to

higher and higher conditions, and that the laws of that progressive movement are similar to those which determine the movement in all evolution, there is no longer any doubt. These formal laws of continuous movement—*e.g.*, the law of differentiation, the law of progress, etc.—these are the really grand thing about the evolution theory, and for these we are indebted to Agassiz. Yes, Agassiz, although he, to his latest utterances, contested modern views, was himself the great founder and apostle of evolution. All the laws of the evolution of the organic kingdom, as now recognized, were announced by him. His whole life and strength were devoted to enforcing and illustrating these laws, although he denied the existence of any discoverable *cause* except the Great First Cause. To him the organic kingdom seemed a great *work of art*, wrought out through inconceivable time to higher and more perfect conditions, according to a plan predetermined in the mind of God; and he was undoubtedly right. Darwin, on the other hand, attempted to discover the *secondary causes* by means of which this marvellous result was attained. To him the organic kingdom, as a whole, was a great and complex *organism* developing under the operation of *resident forces*; and he also, as I conceive, was right. Agassiz announced all the *formal laws* of the universe of *time* as Kepler did those of the universe of *space*; he was the legislator of the dark abyss behind us as Kepler was of the overarching abyss above us. Darwin, like Newton, though with far less perfect success, attempted the next step in the progress of all science—viz., determining the *causes* of these formal laws. If Kepler had been asked the cause of the beautiful laws of planetary motion discovered by him, he would have answered, “The will of God;” and the answer would have been true, but not scientific, for it places the subject beyond the bounds of science. If Newton had been asked the same question, he would have answered, “*Gravitation*;” and his answer would have been not only true but also scientific, and not only scientific but *complete*. So also Agassiz, when asked the cause of the grand laws of evolution discovered by him, answered, “The eternal plans of God”—a noble and true answer, but not scientific. Darwin answers the same question by the phrases, “*changing environment*” and “*survival*

of the fittest ;" and this answer is not only true but also scientific, though very *incomplete*. A true causal theory of planetary movement might be and indeed was born in the mind of *one* man ; but a true causal theory of evolution movement is far too complex to be born in the mind of any one mind—far too difficult to be made perfect at one step. Agassiz is undoubtedly the Kepler of the time-universe ; but the honor of its Newton must be divided among many, though Lamarck, Darwin, and Spencer are certainly the pioneers in this more difficult field.

My own position on the question of evolution has been already several times published, but may be here briefly summarized as follows : *First*. Whether we yet know the natural or secondary causes of evolution or not, Science, by virtue of her nature and mission, must ever strongly incline to believe in such causes and strive to discover them. *Second*. Of such causes we very probably know *some*, though certainly *not all*, nor probably the most important. *Third*. Under the influence of all the factors of evolution known and unknown, the rate of evolution has certainly not been uniform, but more or less *paroxysmal*. This is especially true of the introduction of new and higher grades of force on the stage of nature, but is also true to a large extent of the introduction of new organic forms ; the general law of all evolution, whether individual, social, cosmic, or organic—in fact, of nearly all phenomenal change, being *periodicity*, not uniformity.<sup>1</sup>

After this long but not unnecessary introduction, we are now prepared to take up the special subject of our article. I say not unnecessary, because in so complex a subject the chief difficulty of a writer is to bring the reader to his own standpoint.

In the language of Scripture, man was made " of the dust of the earth," " in the image of God," and " became a *living soul*" —*i.e.*, as I take it, an *immortal spirit*. The first expression refers evidently to his body ; its material, like that of all other animals, is taken from the common stock of nature. With this we have at present nothing to do. The last two refer to his

<sup>1</sup> See my article on "Critical Periods in the History of the Earth." *American Journal of Science and Arts*, vol. xiv. p. 99, 1877.

spirit. An immortal spirit—in the image of God. These two expressions, as I hope to show, imply each other. We are chiefly concerned, however, with the former.

Next to a belief in God, the belief in immortality is the most dearly cherished and most universal of all human beliefs. Upon these two rests the whole superstructure of religion and morals, and therefore the whole fabric of society. It is against this belief that materialism directs its strongest attack. There is no disguising the alarming effect of these attacks—the formidable danger which threatens the dearest hopes and highest interests of humanity from this quarter. There is no disguising that there is at present a strong current of thought towards materialism—a current strong enough to sweep away and bear on its bosom all the light and giddy votaries of philosophic fashion—and that this current is chiefly directed and urged by science. There is no disguising the fact, too, that, with the present bias of thought, the position of the materialists seems even to many candid minds almost impregnable. I wish, therefore, to state briefly this argument, and even to press it, in order to justify the attempt I am about to make to sap its foundation.

In recent times physiology has made great and, to many, startling advances in the direction of connecting mental phenomena with brain changes. Physiologists have established the correlation of physical and chemical with vital forces, and probably of vital with mental forces. They have proved in every act of perception, first a physical change in the sense-organ, then a vibratory thrill along the nerve-fibre, and a resulting physical change in the brain; and in every act of volition a return vibratory thrill along the nerve from brain to muscle, and even the velocity of transmission of this vibratory thrill has been measured and found to be only about one hundred feet per second. They have also established the existence of chemical and molecular changes in the brain corresponding to changes of mental states, and with great probability an exact *quantitative* relation between these changes of brain and the corresponding changes of mind. In the near future they may do more: they may localize all the different faculties and powers of the mind in different parts of the brain, each in its several place, and thus lay the foundations of a truly scientific phrenology. In the far dis-

tant future we may do even much more : we may connect each kind of mental change with a different and distinctive kind of molecular brain change. We may find, for example, as has been humorously remarked, a right-handed rotation of atoms associated with *love* and a left-handed rotation of atoms associated with *hate*, or a gentle sideways oscillation associated with *consciousness*, and a vertical pounding associated with *will*. We may do all this and much more. We have thus, triumphantly exclaims the materialist, completely *identified* mental changes with brain changes—spirit with matter. Thought and emotion, will and consciousness, become products of the brain in the same sense that bile is a product of the liver, or urine a product of the kidneys.

Such is the argument ; but the answer is plain. We may do all that we have supposed above and much more. We may push our knowledge in this direction as far as the boldest imagination can reach, and even then we are no nearer the solution of this mystery than before we commenced. Even then it would be impossible for us to conceive how brain changes can produce mental changes. Molecular motion and chemical change on the one hand, sensation and consciousness on the other : the two sets of phenomena belong to different orders, different planes—planes so different that it is impossible to construe the one in terms of the other. This inability is not the result of our imperfect knowledge, but of the fundamental difference in the orders of the phenomena. It is not one which disappear with the advance of science, as many seem to think, but is for us an eternal impossibility. Suppose an infinitely perfect human knowledge— infinite in *degree*, but human in *kind* ; suppose an absolutely perfect science—a science which shall have so completely subdued its whole domain, and reduced it to such perfect simplicity, that the whole cosmos is expressed in a single mathematical formula—a formula which, worked out with plus signs, shall give every phenomenon which shall ever occur in the future, and with minus signs every event which has ever occurred in the past history of the cosmos. Surely this is an infinitely perfect science, an absolutely unattainable ideal. Yet even to such a science the relation of molecular motion, on the one hand, to sensation, consciousness, will, thought, emotion,

on the other, would still be as great a mystery as ever. Like the essential nature of matter and the ultimate cause of force, this relation lies beyond the domain of science.

Nearly all the most advanced scientific thinkers, even those with strong materialistic sympathies, have acknowledged the force of the above reasoning ; they have admitted the existence here of a chasm which can never be spanned. But very recently Nageli, in his address<sup>1</sup> to the assembled German scientists, entitled "The Limits of Knowledge," attempts to answer it. According to him there is nothing strange or unique in the mystery of this relation ; for precisely the same mystery underlies all other forms of force and all phenomena when considered as to their essential nature. To this I answer in turn : True ; but this mystery is of a different and higher order. Physical and chemical forces are indeed incomprehensible in their essence, but once admit their existence, and all their different forms are mutually convertible—may be construed in terms of each other, and all in *terms of motion*. But it is impossible, by any stretch of the imagination, thus to construe mental forces and mental phenomena. It may be impossible for us to understand *how came* the plane of material forces, but standing on that plane all is intelligible order ; but there is still another plane above this one having no such intelligible relation with it. We must climb up and stand on this higher plane before we can reduce its phenomena to order. In a word, material forces and phenomena are indeed a mystery, but only of the first order ; but mental and moral forces and phenomena are a mystery even from the standpoint of the other ; they are therefore a mystery of the second order.

I repeat, therefore, with still more confidence, that the two series of phenomena, the physiological and the psychological, though invariably associated with each other, term for term, cannot by any effort of the imagination be construed the one in terms of the other, or explained the one by the other. They cannot, therefore, be imagined to be correlated or mutually convertible as are the different forms of physical and chemical force, nor can they be imagined to stand in the relation of

<sup>1</sup> *Nature*, vol. xvi., p. 531, 1877.

cause and effect *in the same sense* in which we use these terms when we speak of lower forces and phenomena, where cause and effect express only change from one form of *motion* to another.

But there is another materialistic argument far more difficult to answer. I refer to the *argument from evolution*. We are especially concerned with this argument because, leaving aside the question of the existence and the nature of spirit and its relation to the material organism as being of less moment, it attacks directly its quality of immortality.

Biologists recognize in organic nature three series similar in general character, yet different in detail, connecting the lowest forms of life with the highest. *First.* Commencing with the highest existing organisms and going down the scale, we pass through successively lower and simpler conditions until we reach the simplest conceivable expression of life in the single microscopic spherule of protoplasm, the moner. This is the natural history series, or *Taxonomic series*. *Second.* Commencing with the mature condition of one of the higher animals—for example, man—and going backward in the individual history, we again pass successively through simpler and simpler conditions until we again reach the simplest expression of life in a single microscopic spherule of living protoplasm—the germ-cell: this is the embryonic or *Ontogenetic series*. *Third.* Commencing with the higher organisms now inhabiting the earth, and going backward in the history of the organic kingdom, we again pass through successively simpler and simpler conditions until we reach again almost, if not quite, the simplest expression of life in a shapeless mass of living protoplasm, the Eozoön: this is the geological or *Phylogenetic series*. Let us take up these series in succession and apply the argument.

First, the Taxonomic series. Immortal spirit: what is it? What are its essential faculties or properties? Consciousness, will, thought, emotion, memory, imagination: surely these are among them. These are among the things treated of in every work on mental philosophy or psychology. But are these faculties peculiar to man? Does not a dog or an ape also possess them in a less degree? Undoubtedly. How then can we assume immortality as the prerogative of man alone? But if we once pass the gap between man and the higher mammals,

where again can we draw the line? Can we draw it between animals and plants—between sentient and non-sentient life? We cannot; for the two kingdoms graduate into each other completely—so completely that many organisms are claimed by both botanists and zoologists. Shall we draw it, then, between living and dead nature? Here certainly is a gap and a wide one; but undoubtedly vital forces are correlated with physical and chemical forces, and therefore are transmuted from and again convertible into these lower forces. As the organic kingdom is so much matter withdrawn from the common fund of nature, embodied for a brief space in living forms, to be again refunded, every atom, by death; even so organic forces are only so much energy withdrawn from the common fund of chemical and physical forces, to be all again refunded at death. Where, then, shall we draw the line between the mortal and the immortal? Evidently they are all mortal or none.

Or, again, take the Phylogenetic series. In the gradual evolution of the organic kingdom to higher and higher forms throughout the whole geological history of the earth, when did immortal spirit enter? Not with life, for vital or life force is correlated with chemical and physical forces. Not with sentient life, for the gradation between sentient and non-sentient life is complete. Not with man, for the properties of so-called immortal spirit already existed in the higher mammals before man arrived on the stage.

Or, again, take the Ontogenetic series. Each one of us individually has commenced our history, as a single microscopic spherule of living but non-sentient protoplasm, and has become what he is by a process of gradual evolution. Now, in this process of evolution, when did our own immortal spirit come in? Or, even leaving aside the intra-uterine condition: In what respect is the new-born infant superior to the adult of one of the higher mammals? Doubtless it will be answered, the difference and the superiority is potential; but, according to the evolutionist, was not man, before his actual appearance on the earth, also potential in the animal kingdom?

Is it not more rational, then, to conclude, with the materialist, that spirit and immortality are a delusion—that man

also, body and mind, is dissolved, refunded at death into the common stock of matter and force?

Such in brief is the argument. No one can have felt its force more keenly than I have. I desire now to answer it. I do not propose, however, to make a *direct* argument for immortality; but accepting immortality on other grounds derived from consciousness, from philosophy, and from revelation, I wish to reconcile it with the facts of evolution given above. I wish to show *how* immortality may be brought in accord with the general scheme of nature—*how* spirit as a force is related to the other forces of nature. I fully appreciate the difficulty of the task. I approach it with diffidence, keenly conscious of weakness, and therefore asking indulgence for incompleteness.

The forces of nature I regard as an effluence from the Divine Person—an ever-present and all-pervading divine energy. The laws of nature are naught else but the *regular* modes of operation of that energy, universal because He is omnipresent, invariable because He is unchanging: the phenomena of nature are the acts of Deity, perhaps not in the *most direct* personal sense, but in a sense far more direct than even Christians in these modern times are accustomed to think. This is undoubtedly the scripture doctrine. “Thou openest thy hand, they are filled with good; thou hidest thy face, they are troubled; thou takest away their breath, they die and return to dust.” “He looketh on the earth and it trembleth. He toucheth the hills and they smoke.” “He maketh his sun to rise on the evil and the good, and sendeth rain on the just and on the unjust.” God immanent—God pervading nature, and yet not identified with nature: this Christian pantheism is the only true philosophic view. Under the influence of physical and mechanical philosophy we have been too much accustomed to regard nature as a complex mechanism, made and wound up in the beginning, and then left to work out its own results by means of forces within itself. This view is wholly untenable. Either nature is self-sufficient and needs no creator, or else God is ever present and ever working in nature. No intermediate view is philosophically possible. The former is the view of a materialistic, the latter of a religious philosophy. It is true we habitually

make a compromise between these extreme views. It is true that even those who recognize the efficiency of God alone as the cause of the phenomena of nature, still every day act and speak as if natural forces were self-acting agents. It is true that this is the theory of all effective practical work, the formula under which science and art have accomplished all their splendid results. It is true that second causes and natural energy daily come between us and the First Cause—the Divine Spirit—and conceal from us the divine presence in nature. Not only is all this true, but it is perhaps well for us that it is so. This is the cloud in which the excessive brightness of the absolute is tempered to our capacity. Religion and philosophy, but not science, may look behind the cloud. The efficiency of natural forces is our every-day working clothes, the necessary garb of the workshop ; but let us put it off for more becoming garb when we return from daily work to the home and sanctuary of the spirit. Although, therefore, in our philosophy we hold the higher view, we are often compelled to use the language of the lower view—*i.e.*, the language of science and practical life.

In the beginning, then, the Divine Spirit, brooding upon primal chaos, energized dead inert nature, communicating an influence, an energy, a life which became through all time the force of evolution of the cosmos. This all-pervading divine energy, which science calls *force*, was at first wholly and equally diffused ; but through all time *individuated* itself more and more under favoring conditions (I speak the language of science), and thus assumed higher and more special forms, until finally, by completed individuation, it reached the condition of immortal spirit—the image of God, whence it originally came. Such is a condensed statement of the process ; now the steps in more detail.

1. In its original diffused, generalized, *unindividuated* condition we call this pervading divine energy physical and chemical forces, for these are the most universal, the lowest and evidently the earliest form of force. This is the general fund, the bank from which all other forms are drawn.

2. A portion of this diffused force, a spark of this divine energy, drawn from the common fund, partially and imperfectly individuates itself under the favoring condition of organization,

attains new powers and properties—viz., assimilation, growth, reproduction, and thus becomes the vital force of plants or non-sentient living beings. In this case, observe, even the material organic individuality is not yet complete, much less the kinetic or force individuality.

3. A portion of this already partially individuated energy (for animals draw their vital force from plants) becomes more highly individuated under conditions of higher organization, especially the presence of a nervous system, attains in addition still higher new properties and powers—viz., sensation, consciousness, will, intelligence—and thus becomes the sentient principle—the *anima*—the soul of animals. In this case, at least in the higher forms, the material or organic individuality is already completed, but not yet the kinetic or spiritual individuality (personality), although there is already the foreshadowing, the semblance even of this latter.

4. In man the progressive individuation of force becomes at last complete. Force in him becomes a complete separate, independent entity, with new and far more wonderful powers and properties added; not only consciousness, but also self-consciousness; not only will, but also free, self-determining will; not only intelligence and instinct, but also reason and moral sense; not only a mere semblance of, but a true, personality. This completed kinetic individuality is what we call the spirit of man. Self-consciousness, moral sense, and reason to discern good and evil, and free will to choose the right or wrong, in a word, personality—the possession of these makes him the image of God.

But why immortal? I answer, because individuation is complete; because this portion of force is separated completely from the general fund of natural forces as a distinct entity capable of independent existence. In plants, force-individuation is very imperfect; therefore, when the conditions of this partial individuation—viz., organization—is removed by death, the individuation also is destroyed, and the forces are again merged into the common fund of natural forces. In animals the individuation of resident forces is far greater; it may even simulate in the higher forms a true individuality (spirit); but only simulates, for remove the conditions of individuation by

death of the material organism, and the nearly completed individuation of resident forces is destroyed, and these again merge back into the common fund of natural forces. But if once the individuation be completed to actual separation, if once the resident force attains spiritual individuality or personality, it then becomes a separate entity, capable of independent life. Destroy now the original conditions of its individuation—viz., organic life—and the already individualized and separated force-entity (spirit) is not again refunded.

In so difficult and intangible a subject I can make myself clear only by several material illustrations, each perhaps imperfect, but all combining to place the subject in a clearer light.

Let the dead level of general individuated, physical, and chemical forces of nature be represented by a water surface



A B. In this watery mass, tending ever to perfect level, let gravity be abolished and only *cohesion* remain as the refunding force, or the tendency to return to the dead level. Now, suppose some force to pull upward against cohesion, a small portion of the watery mass above the common level, to form, as it were, a drop, as shown in the figure above. Then, if the upward-acting, drop-forming force suffice only to form a commencing drop, a mammilla  $\alpha$   $\alpha'$ , then we have the condition of force as it exists in plants. If the upward-pulling, drop-forming, individuating force be greater, so that we have the semblance of a drop, though not a complete drop—a nipple-shaped protuberance  $b$ , or even a round button connected by a neck  $b'$ , then we have a representation of the condition of force as the sentient principle or anima of animals. If, lastly, the drop be completed and separated, we have the condition of force as the spirit of man, separated, yet seemingly connected, as shown by the dotted lines in  $c$ . Now, it is evident that in  $\alpha$   $\alpha'$  and in  $b$   $b'$ , if we remove the lifting or individuating force, cohesion prevails and the commencing or even the nearly completed drop is refunded. But in  $c$  remove the original lifting or individuating force, and there is no longer any tendency to return,

for the cohesive ligature is already severed. The drop is a separate entity, *totus tercis atque rotundus*, and therefore capable of independent existence. Even the semblance of cohesive connection, represented by the dotted lines in *c*, is severed by death in *c'*

To illustrate again: The vital principle of plants and the sentient principle or *anima* of animals are *spirit in embryo*, enclosed and fast asleep in the womb of nature—in the latter case, indeed, already *quickened* but *not yet viable*. In man *spirit comes to birth*, emerges into new and higher conditions, becomes capable of independent life, though still drawing nourishment from his nursing mother, Nature. Death only weans us. Thus; as the organic embryo by birth comes to independent *temporal* life in the lower plane of matter, so the spiritual embryo, by birth in man, comes to independent *eternal* life on the higher plane of spirit. The mature embryo how like the *new-born!* the higher animals how like to man! Yet in both cases there is an immense difference; in both cases there is a sudden entrance on an entirely new and higher plane of existence—a sudden entrance into a new world; in both cases there is a sudden appearance of a new creature with entirely different capacities—a passing out of an old world and a waking up in a new and higher. Man, alone, is the *child of God*.

Or, again, as in passing up the scale of organic nature we find a very gradually increasing individuation of bodily form which completes itself as a true *organic* individual only in the higher animals, so also, in passing up the kinetic scale, force is individuated more and more until the process reaches completion as a *spiritual* individual, a personality, only in man.

Or, again, in plants and animals spirit is completely immersed, deeply buried head under, submerged in nature, and totally unconscious of any higher world above. In man, spirit emerges out of nature, rises above nature into pure air and a higher world; therefore looks *down* on nature, around on other emerged beings like himself, and upward, with longings toward the overarching heaven above him. He thus becomes conscious of the distinction of self and not-self.

Observe how every characteristic of man is potentially included in, and necessarily flows out of, this one central idea

of completed spiritual individuality. From it flows immediately self-consciousness, or consciousness of the distinction of ego and non-ego. This, again, is identical with what we call personality. Again, necessarily flowing from the conception of self-conscious entity is the recognition of moral relations with other self-conscious beings like self and with God. Equally closely connected with the central idea of spiritual individuality is that of free choice, self-determining will ; and from this again flows necessarily moral responsibility, which generates, in its turn, the capacity for holiness and unholiness, virtue and vice. Out of the same central idea flows the necessity of a state of probation ; for all moral culture comes and can only come through the exercise of free-will ; and from the idea of probation, or a state of preparation for a higher life, flows the whole significance of human life. It would be easy, if it were not unnecessary, to show that all else characteristic of man—religion, science, art, philosophy, progressive society, etc.—necessarily flow from the same central idea.

Now, since this spiritual individuality is the very essence of humanity, and since self-consciousness or recognition of the ego, or the turning in of the thoughts on the mystery of self, is the most fundamental sign of this condition, it is evident that, taking even the extrekest evolution view of the origin of man—viz., the view that he grew out of the lower animals by infinitely slow gradations requiring thousands of generations (a view improbable even from the pure scientific standpoint, for there are paroxysms in all evolution)—even from this extreme view, whenever, in the gradual process of change to higher and higher conditions, the advancing organism awoke to self-consciousness ; whenever, among its mental phenomena, appeared reflection on the mystery of self, then, at that very moment, was humanity born of animality ; at that very moment was born a new creature capable of a higher and better life ; at that moment was born the capacity for indefinite progress in art, science, religion—in a word, all that is characteristic of man. As the new-born infant scarcely differs in structure from the mature embryo, and yet belongs to an entirely different and higher plane of existence, so, on this extreme view, primeval man may have differed little in struc-

ture or in intelligence from some pre-existing mammalian species, his immediate progenitor, and yet have been nevertheless infinitely removed—being, in fact, raised into a higher plane. However slow or fast the process of advance toward man may have been, the *actual becoming* man must necessarily have been an instantaneous phenomenon—a real birth. By whatsoever means this change was effected, whether natural or supernatural, its importance and significance is still precisely the same. Henceforth commences inevitably an eternal conflict for supremacy between the new-born spirit, the essential humanity, and the inherited animality. In this conflict consists the whole significance of human life, and on its result hangs the destiny of each individual human spirit; for all true progress or betterment of whatever kind, whether of the individual or of the race, is through the growth of the higher or characteristically human, and its triumph over and subjection of the lower inherited animal nature.

We have seen that the complete individuation and separation of spirit from the general fund of divine energy pervading nature, is the essential characteristic of man—is that which underlies all other characteristics and constitutes him man. In this, therefore, consists the essential dignity, but also the weakness and imperfection of man. In all lower nature God works in nature by the perfect laws of nature, and therefore the work is always good. In man alone, and only because he is self-working, do we find blundering work. Even in the highest animals conduct (if it may be called such) is largely instinctive, pre-arranged, pre-determined in wisdom by brain-structure. Man alone is left to walk by his own strength and whither he will. The conduct of the lower animals, like the path of an engine, is laid on a track which bears it swiftly and surely to its proper goal. Man alone must choose his way in the wide pathless world, with only feeble reason to guide. Therefore is his course full of mistakes, sad stumblings, and often fatal fallings.

The essential character of immortal spirit, then, is complete individuation and separation from the pervading divine energy—separation from the Divine Spirit—separation from God. Alas! is this, then, it will be asked, the sum of our philosophy? Yes, I answer: separation *physically*, but only in order to unite

again with Him *morally*. Physical *bonds* are broken only that thereby higher moral, personal relations may be established. As by the nebular hypothesis the earth must break away from *cohesive* connection and become a separate planet before she can establish higher *gravitative* relations with the central sun and with other planets, and move with them in sweet accord, making spherical music ; even so spirit must break away from cohesive physical connection with the divine energy and become a distinct self-conscious entity, before she can enter into higher moral relations with the central sun of righteousness or with other spirits, and move with them in the beauty of holiness, making far sweeter moral harmony. As in the physical cosmos the law of cohesion is replaced by the freer law of gravity, even so in the moral cosmos must the law of necessity be replaced by the free law of love. In both the former condition is a preparation for the latter.

But the upward tendency which runs through all nature does not stop with man. It is again taken up by man and carried forward in a higher sphere. As spirit in the womb of nature gradually grew to higher and higher conditions until it broke away and came to birth and freedom in man, so the spirit of man immediately enters into a new and higher embryonic condition, to reach by evolution a new spiritual birth and a higher moral freedom as *regenerated man*. As nature through all geological times struggled slowly upward to reach its final term, its goal, its *ideal*—in a word, to *finish its work* in man ; so man immediately enters upon a new race to reach *his* goal and ideal—the *divine man*. As on the lower plane the divine brooding spirit flowed outward and *downward* into all nature as force, informing, energizing, vitalizing, while the forces of nature responsive struggled *upward* again through all time, by progressive individuation and final separation, to reach in man apprehension of God, whence it originally came ; so also, on a higher plane and in a higher and more personal sense, the Divine Spirit flows outward and downward through all revelation into man's spirit, regenerating, revitalizing, while man's spirit, responding, again struggles upward to reach not apprehension only, but moral union with God.

But it will be asked, “ Is not all this contrary to the great

law of conservation of energy?" In all lower nature both living and dead force changes its *form*, but the sum of force remains eternally the same. It may seem to disappear, but really only changes from the visible to the invisible form, from the palpable to the impalpable. It disappears as molar motion, but only to reappear in equal amount as molecular motion. The whole sum of energy, like the whole sum of matter, amid all its changes remains eternally constant. Organic matter and organic forces are no exception to this law. Animals and plants in death refund both their matter and their forces to the common stock of matter and force. The same matter and force may be retaken and refunded by many successive generations. Thus the same matter and force has passed, by eternal circulation, through different forms thousands, probably millions, of times in the history of the earth. There is a universal law of circulation, of flux and reflux, which *includes both matter and force, and both dead and living forces*. But if man be immortal we must have in him an exception to this law. His body is indeed returned, his vital forces may be refunded, but his spirit, on this view, retains forever its personality. Therefore every man dying carries away just so much from the sum of natural energy. Therefore, there is a *constant drafting* on the bank of natural forces, and *no refunding*. Will not this eventually bankrupt nature? Yes, I answer; but what a glorious bankruptcy! Material forces gradually exhausted disappear as material forces, only to reappear embodied as spiritual individuals. The law of conservation of energy is *not* violated, the sum of energy is not diminished, but only the sum of circulating, material, natural energy, diminished because passed into fixed eternal—*i.e.*, spiritual conditions.

Bankrupt nature! Yes; but do not all scientific speculations, on the subject of the final destiny of the cosmos, bankrupt nature? Is not the final result, according to all such speculations, the *running down* of all forms of force into heat and the final equal diffusion of this heat, and so the final death of the cosmos? Is not this the necessary final result according to the *doctrine of the dissipation of energy*? But according to our view, this event, though inevitable, does not take place until, by *the very process*, much if not all natural forces shall be raised

little by little and separated as embodied forms of spiritual intelligences ; until there exists only a moral and spiritual cosmos, with love or spiritual attraction as its universal law, as gravitation is now of the material cosmos.<sup>1</sup> Thus the material cosmos becomes first a womb and then a nursery for the spiritual children of God, and having served its purpose disappears. Nature becomes first a *gestating* and then a nursing mother of man in a far deeper and more literal sense than is usually supposed. This, then, is the end, the object, the whole significance of the material cosmos. What other significance so noble, so worthy of God ? Yea, what other significance, I might ask, is possible or conceivable as at all worthy of Him and of the past eternity of His preparation ?

JOSEPH LE CONTE.

<sup>1</sup>I have shown in my article on correlation of vital with physical and chemical forces (of which, in fact, it constitutes the central idea) that for every portion of matter and force *raised* to a *higher* level there is a corresponding *running down* of another portion to a *lower* level. These are invariable correlatives, and probably stand in the relation of cause and effect. It is as if the running down generated the lifting force. Is it not possible then that the doctrine of the running down and dissipation of energy is the correlative of the doctrine of immortality ?

## THE DUTIES OF HIGHER TOWARDS LOWER RACES IN A MIXED COMMUNITY.

**I**N approaching the question of the duties owed by higher to lower races in a mixed community, it is necessary, first of all, to enter upon the consideration of another, a very deep and recondite one—that, namely, of the original unity or non-unity of the human race, a subject on which much variety of opinion exists among recent thinkers. Clearly, if “mankind” is only a convenient word, under which races quite distinct in origin, and essentially different in their physical and moral natures, may be grouped, the duties of race to race will be quite other from those which would obtain under the condition of an original essential unity. Some duties are owed by a being such as man to every creature capable of feeling pleasure and pain ; but the extent and character of the duties necessarily vary according to the degree of community existing between the creature and him. Man may kill for his own advantage, safety, or convenience, any number of the mere animal creation ; he may without blame exterminate or enslave them ; he may subject them to much pain and suffering even for a problematic benefit ; but such treatment of his own species would be condemned and pronounced inhuman by almost any moralist.

The case may be rendered clearer by one or two illustrations. The voyagers who in remote times explored the unknown regions of the earth found a difficulty in determining exactly where humanity ended and mere animal nature began. They did not know whether they ought to account the larger tribes of the *quadrupeds* to be monkeys or men. On the whole, they inclined rather to the human theory. But their civilization

being imperfect, and their ethical code faulty, they proceeded to deal with the tribes in question in a way which, under their theory, was wrong. "At the bottom of this bay," says one, "lay an island like the former, having a lake, and in this lake a second island, full of wild people. Far the greater proportion were women, whose bodies were covered with hair, and whom our interpreters called Gorillæ. Though we pursued the men, we could not catch any of them, since all fled from us, escaping over the precipices, and defending themselves with stones. However, we took three women; but they attacked their conductors with their hands and teeth, and could not be prevailed on to accompany us. We therefore killed and flayed them, and brought their skins with us to Carthage."<sup>1</sup> This narrative revolts our feelings, not on account of what the voyagers did, which was merely to provide the Carthaginian Museum with the material for a few stuffed pongos or gorillas, but from the assumption made that the pongos were "men" and "women," and that, being such, it was lawful to treat them as they were treated by their captors.

At a much later date, in Christian times, and among men calling themselves Christians, we find practices prevailing similar to those of the Carthaginian explorers, but with the difference that the objects of them are human beings, in the ordinary sense of the words. On the first arrival of blood-hounds in St. Domingo, the planters who had sent for them, and who wished to test their ferocity, "delivered over to them, by way of trial, the first negro on whom they could lay their hands. The dogs devoured him with much promptitude, to the great satisfaction of their owners," whom the moral indignation of the historian designates as "white tigers in the form of men."<sup>2</sup> Probably the planters would have justified themselves by denying that the negroes were men in the true sense of the word, and would have indignantly rejected the notion that they were beings of the same blood with themselves, with the same capacities, the same feelings, and the same natural rights.

<sup>1</sup> Hanno, "Periplus," pp. 13, 14.

<sup>2</sup> Grégoire, "Sur la Littérature des Nègres."

The inquiry, whether all men are of the same race or no, may be treated in two ways: either from the standpoint that Holy Scripture is of divine origin and so authoritative; or, without any such assumption, upon a mere human and scientific basis. As the authority of Scripture is not universally admitted among the educated classes, either in America or in Europe, it seems desirable to include in the present paper both lines of argument. The question of the proper treatment of lower races by higher ones is a matter in which all men, whether Christians or not, are interested; and one on which we may assume that all men would wish, if they could only see their duty, to carry it out.

It will scarcely be denied that Scripture, in its *prima-facie* aspect, teaches the original unity of mankind, or, in other words, the derivation from a single pair of all the men and women upon the face of the earth. It is not a divine, but a philosopher, who lays it down, in the most positive and precise terms, that "the Sacred Scriptures declare that it pleased the Almighty Creator to make of one blood all the nations of the earth, and that all mankind are the offspring of common parents."<sup>1</sup> And it is admitted on all hands that the almost universal opinion in all ages has been that this is the teaching of Scripture. But recently the view has been broached, and maintained with much ability,<sup>2</sup> that the almost universal opinion is erroneous; that the passages of Scripture usually thought to indicate the origination of all mankind from a single pair need not be understood in this sense; and that there are other passages which sufficiently indicate the existence of human beings in the early times outside the circle of the "Adamites," or descendants of Adam and Eve, and which therefore teach, at least, a *dual* origin of mankind, whom the supporters of the view consequently divided into "the Adamites" and "the non-Adamites." The "non-Adamites" are thought to have survived the Flood, and to constitute a large portion of the existing inhabitants of the earth; the "Adamites," who are identified

<sup>1</sup> Prichard, "Natural History of Man," p. 5.

<sup>2</sup> See a work entitled "The Genesis of the Earth and of Man," by an anonymous author, edited by Mr. Reginald Stuart Poole, of the British Museum.

with the Caucasians, also continue to exist, and from them are derived all the more important and governing races.

It will be necessary, in order to determine the true teaching of Scripture upon this point, to pass briefly in review the passages on which the advocates of either theory rely, and to compare them, if not individually, yet at any rate collectively, with each other, in order that we may see to which side the balance of probable exegesis inclines, and which opinion has therefore the greatest claim upon us for acceptance. A further consideration may then be urged, which will have weight with those who do not regard the Bible as self-explanatory, but view it as having had, and as intended to have, from the first, its meaning fixed by the oral teaching of a living church, its witness, keeper, and interpreter.

I. The passages which are thought to indicate the existence in the early times of human beings not descended from Adam are chiefly the following: Gen. 4:13-16; Gen. 6:1-4; Gen. 10:5, 21, 31, 32; and Deut. 32:8. It is also urged that Cain and Seth, who had descendants, must have had wives who were not their sisters, and that it is most natural to suppose that these were women of a non-Adamite race, which existed upon the earth before the creation of Adam. We begin by examining the alleged passages.

In Gen. 4:13-16 we read: "And Cain said unto Jehovah, My punishment is greater than I can bear.' Behold, thou hast driven me out this day from the face of the earth; and from thy face shall I be hid: and I shall be a fugitive and a vagabond in the earth; and it shall come to pass that every one [or "any one"] that findeth me shall slay me. And Jehovah said unto him, Therefore whosoever slayeth Cain, vengeance shall be taken on him sevenfold. And Jehovah set a mark upon Cain [or "gave a token to Cain"], lest any finding him should kill him. And Cain went out from the presence of Jehovah, and dwelt in the land of Nod [or "the land of banishment"], on the east of Eden." It is argued that the persons whom Cain feared, and among whom he went out to wander, must have been non-Adamites, the previous possessors of the earth, who would, he thought, slay him, not as a murderer, but as a stranger and an alien, an intruder into their hunting-grounds, a

trespasser on their preserves. If he had any kindred at this time, it is said, besides his father and mother, he was just about to quit them, and to plunge into a remote region. How, then, should he fear their vengeance? Nay, according to the narrative, he seems to have had as yet no other kindred, for Eve had up to this time borne only two children, Abel and himself (Gen. 4:1, 2), Seth, her *third* son, not being born until Abel was dead (Gen. 4:25). That Cain alluded to unborn sons or grandsons of Adam, who, he thought, might in course of time be a danger to him, is said with reason to be improbable, and at any rate "not the obvious meaning of his words," which point to a present peril. The reasoning, it must be admitted, is ingenious, and if the data be allowed, unanswerable; but a false, or at least an unfounded, assumption vitiates the whole—the assumption, namely, that the three sons of Adam and Eve mentioned by name in the narrative of Genesis were their three eldest sons, and that the many "sons and daughters" who are first mentioned after Seth has been spoken of (Gen. 5:4) must have been born subsequently to that patriarch. There is nothing in Scripture to show that several of these children were not born to our first parents between Cain and Abel, and several others of them between Abel and Seth. The many "sons and daughters" are not necessarily born after Seth, because they are first mentioned after Seth has been mentioned. It is probable that nearly a hundred and thirty years elapsed between the birth of Cain and the birth of Abel. The descendants of Adam and Eve may easily by this time have amounted to several thousands. They may have spread into all the lands bordering upon Eden; and Cain may have feared, not the hostility of aliens jealous of an intruder, but the just vengeance of a relative, who, as "pursuer of blood," on finding him would slay him. This is the mode in which the passage has been generally understood; and the exegesis is, to say the least, quite tenable.

Gen. 6:1-4 runs as follows, in the authorized English version: "And it came to pass, when men began to multiply on the face of the earth, and daughters were born unto them, that the sons of God saw the daughters of men that they were fair; and they took them wives of all which they chose. And the LORD (*i.e.*, Jehovah) said, My Spirit shall not always strive with

man, for that he also is flesh ; yet his days shall be an hundred and twenty years. There were giants in the earth in those days ; and also after that, when the sons of God came in unto the daughters of men, and they bare children unto them, the same became mighty men which were of old, men of renown." This is confessedly a passage of much difficulty, and one which has received various interpretations. The "sons of God" have been regarded as angels, as "men of high rank," as the descendants of Seth, and as the descendants of Cain ; the "daughters of men" have been taken simply for women, for "maidens of low birth," and for women of the Cainite blood. It is now proposed to translate the passage as follows, and to understand it in an entirely new way.

*Translation.*

" And it came to pass, when the Adamites began to multiply on the face of the earth, and daughters were born unto them, that the sons of the gods saw the daughters of the Adamites that they were goodly ; and they took them wives of all which they chose. . . . The Nephilim were in the earth in those days ; and also, after that, when the sons of the gods came in unto the daughters of the Adamites, and they bare children unto them, these were the mighty ones which were of old time men of renown."

*Exegesis.*

By "the sons of the gods" are meant "the worshippers of false gods;" and these, being distinguished from the Adamites, must be of a different race : therefore, probably pre-Adamites, who, coming to know and to admire the Adamite women, intermarried with them, and became the progenitors of a strong and perhaps gigantic race, like to that of the Nephilim, themselves a tribe of pre-Adamites remarkable for their great stature (Num. 13:33). This race committed the "violence" which was the chief cause of the Flood (Gen. 6:11, 13).

Against this interpretation it may be objected : 1. The expression translated "sons of the gods," and understood to mean "worshippers of false gods," has nowhere else that meaning in Scripture, for such a meaning is impossible in Job 1:6 ;

2:1; and 38:7—the only places where the phrase (or one nearly identical with it) occurs. 2. No reason can be given why an intermixture of pre-Adamites with Adamites should produce a gigantic race, the pre-Adamites not being supposed to have been generally of great stature. 3. The fusion of Adamites with pre-Adamites, according to the writer of the "Genesis," had taken place before, and was not a new fact in the world's history, as was clearly that which is the subject of Gen. 6:1-4.

The proposed interpretation cannot, therefore, be accepted as superior to either of the two between which the great mass of biblical critics have always been divided—the old interpretation that the "sons of God" were angels, who, as St. Jude says (vers. 6, 7), "went after strange flesh;" and the more recent one, that the term designates the male descendants of the godly Seth, who, in the time of Noah, contracted marriages with the female descendants of the ungodly Cain.

In Gen. 10, where the dispersion of the sons of Noah is treated of, it is argued that "the nations" (*hag-goyim*) mentioned in verses 5, 20, 31, and 32 are not nations formed out of descendants of Noah, but people of a different origin, pre-Adamites who had survived the Flood, whose lands were now partitioned out among colonies of the Noachidæ. This meaning is thought to be rendered especially probable by Deut. 32:8, which is translated as follows: "When the Most High gave nations for a possession, when he separated the sons of Adam, he set the bounds of peoples according to the number of the children of Israel." The "giving of nations for a possession" is thought to be the assignments of countries inhabited at the time by actual nations to small colonies of the descendants of Shem, Ham, and Japhet.

An examination of this exegesis is scarcely necessary, since it is admitted that the passages in question are "reconcilable with the general opinion of the origination of all mankind" from Adam, and since it would seem to require a very strong prepossession in favor of a different view to see in them any reference at all to other "nations" than those into which the Noachidæ gradually formed themselves. "Goyim" does not "denote always nations exclusive of the people of God." The promise to Abraham is that he should be "the father of many

nations" (*h̄amōn goyim*). "Two nations" (*sh̄eney goyim*) strove in the womb of Rebekah (Gen. 25:23). The people of Israel were to be "a holy nation" (*goy kadōsh*). It is not till after the separation of the Israelites from the other peoples of the earth that a contrast comes to be made between "the (non-Israelite) nations" and the "holy nation," the one people of God.

An argument of quite a different kind, and one far more difficult to meet, is based on the incestuous character of the marriages which (according to the ordinary theory) the children of Adam were forced to contract one with another, if the human race was to be propagated. Incest, it is urged, is a breach of God's eternal moral law. He could not have placed man in circumstances where it was necessary. Cain, Seth, and the other children of Adam must therefore have had it in their power to contract marriages which were not incestuous; and these could only be with men and women of another non-Adamite race, which must consequently have existed upon the earth separate from and independent of the Adamites. To this argument only two answers seem possible; and both of them, it must be allowed, have their difficulties. Either it may be held that incest is not a crime by the eternal moral law, but only becomes one when its consequences are seen to be evil, or when by positive enactment it is forbidden, as it was in the Mosaic law (Lev. 18:9); or it may be said God could, and probably did, create for each son and daughter of Adam who grew to manhood or womanhood, a wife or a husband miraculously, as he created Eve for Adam, though the fact of such creation is not recorded in the Bible. The former view is that generally taken by "orthodox" interpreters, who deny that the moral sense of persons so situated as the children of Adam would tell them that intermarriage between them was unlawful, and consequently that such persons might, and did, innocently intermarry; although, when communities grew up, and acts came to be judged by their results, and the moral sense to be enlarged by cultivation and experience, a conviction of the wrongful character of such unions very generally established itself, and acting against this conviction became a sin, so that the Canaanites were justly punished for it (Lev. 18:24-30; 20:22, 23). Others regard the Canaanites as punished, not so much for incestuous marriages, as

for the worse sins spoken of in Lev. 18:20-23, and 20:10, 13, 15, 16, and consider that incest only became a sin when the positive enactments of the Levitical law were promulgated. It is certainly remarkable that among several of the nations of antiquity which were peculiarly advanced in their moral and religious notions, as especially the Egyptians, incest was scarcely recognized as a crime.

II. We pass now to a brief consideration of the principal passages of Scripture generally regarded as teaching the unity of mankind, only premising that it is impossible to marshal one half of the evidence on this side, since the texts are too numerous for quotation. It is usual, however, to place in the forefront of the argument some five or six passages; and, as these appear to us sufficient for argumentative purposes, we shall be content to adduce this small number.

In Acts 17:26 we read that "God made of one [blood] all nations of men for to dwell on the face of the earth." The word "blood" is doubtful, since it is not found in some of the most ancient manuscripts; but the best critics, as Meyer, Alford, and Scrivener, are in favor of retaining it; and even if we omit it, the meaning will remain the same, since we *must* understand after "one," either "blood," or "man," or "race," or some similar term, and the universal consanguinity of mankind will thus in any case be predicated. It has indeed been argued that universal consanguinity does not necessitate unity of origin, since it may have been brought about gradually by the intermarriage of "Adamites" with pre-Adamites, the two distinct races having thus by degrees coalesced. But the text precludes this explanation, since the verb used is in the aorist tense, and is rightly translated, not "God has made" (as in the authorized English version), but "God made"—*i.e.*, made originally, when he first created the race. And so Alford well explains: "The words controvert the whole genius of polytheism, which attributed to the various nations *differing mythical origins.*" They teach "the true history of mankind, as all *created of one blood.*" They point beyond a doubt, not to a gradual process of amalgamation, which could never be proved to be complete, but to an original blood-unity, complete from the first and not admitting of less or more, an absolute unity of

the species by derivation from a single pair, reaching back to the earliest time, and extending to "all the nations of men which dwell on all the face of the earth." The suggestion is made that in this expression we may have hyperbole, as in Acts 2:5; Matt. 4:8, etc.; but the double use of "all" ("all the nations," "on all the face of the earth") is against such a view, there being (we believe) no instance in Scripture of a double use of "all" where less than universality is meant.

We read in Gen. 2:18: "And the Lord God said, It is not good that man should be alone; I will make him a help meet for him." This passage, it is allowed, "seems at first sight to imply that Adam was the only human being then existing." It is difficult to see how it can have any other sense, more especially in its connection with the next two verses. In these God is represented as bringing to Adam all the living creatures on the face of the earth, to be named by him, and among them "there was not found an helpmeet for him." He was emphatically "alone." Could this have been said if there were already upon the earth many hundreds of women, not sinless indeed, but, humanly speaking, pure and virtuous, among whom he might have made choice? At any rate, would not the narrative have taken a different form had such persons existed? Must not the reason of their unfitness have been pointed out?

Again, we read in Gen. 3:20: "And Adam called his wife's name Eve; because she was the mother of all living." It is argued that "all living" may mean less than all, as "all lands" in Gen. 41:57 clearly means only "many lands," "all the lands round about;" or, if this be not allowed, it is said, the passage at any rate can prove no more than that Adam *imagined* his wife was going to be the mother of all living, the existence of the pre-Adamite race upon the earth not being then known to him. But it seems unlikely that the sacred writer would have gone out of his way to put on record the giving of a name which was founded upon a mistake; or that, if he did so, he would not have explained the mistake and the cause of it. Occurring as it does, the passage, which is very solemn and emphatic, seems to lay down an important fact, that Eve was the mother of the whole human race. It does not say that Adam thought so, but that "she was" (*háyéthop*). It is difficult to see how we

can exonerate the author from the charge of having made a false statement if she was not.

We come now to New Testament comment, and first to what is of the very highest importance—the comment of our blessed Lord. “Have ye not read,” said Jesus, “that he which made them” (*i.e.*, mankind) “at the beginning” (or “from the beginning of the creation,” Mark 10:6) “made them male and female, and said, For this cause shall a man leave father and mother, and shall cleave to his wife: and they twain shall be one flesh” (Matt. 19:4, 5). The reference is clearly to Gen. 2:7-24, where the creation of Adam and Eve is related, and where the words quoted in Matt. 19:5 occur. And this is called “the beginning,” or “*the beginning of creation.*” Would not our Lord have used other language if the creation of men did not begin at this time, but was far earlier, pre-Adamites having existed upon the earth for hundreds or thousands of years before Adam was brought into being?

In the fifth chapter of his Epistle to the Romans, St. Paul has a long and well-known comparison between the bringing in of reconciliation and life by Christ and the bringing in of sin and death into the world by Adam. The most important clauses of the comparison in connection with our present subject are the following: (ver. 12) “By one man sin entered into the world, and death by sin, and so death passed on to all men, inasmuch as all sinned;” (ver. 15) “For if through the transgression of the one the many died, much more did the grace of God, and the gift, abound through the grace of the one man Jesus Christ towards the many;” and, (ver. 17) “If by one man’s transgression death reigned by means of one, much more shall they who receive the abundance of the grace and of the gift of righteousness reign in life by one, Jesus Christ.” The whole argument turns on the parallelism between the one man, Adam, who brought sin into the world, and death by sin, in whom therefore all died; and the one man, Christ Jesus, who brought in righteousness and life, in whom (potentially) all are made righteous and live. It is sought to limit the term “all men” in Rom. 5:12 to “the descendants of Adam,” and the term “world” to “the world of Adam’s race;” but these limitations, which are purely arbitrary and derive no support from the context, strike

at the very root of the argument, which is that all men—all the inhabitants of the earth—sinned in one man, viz. Adam, and that all are redeemed, have life (potentially) in one man, viz. Christ. The derivation of all men from Adam underlies the whole of St. Paul's reasoning, both in this chapter and in 1 Cor. 15 : 20-23, which has now to be considered.

"Now is Christ risen from the dead," says the great apostle, in the well-known words which have carried comfort and consolation to thousands upon thousands of mourners—"Now is Christ risen from the dead, [and become] the firstfruits of them that slept. For since by man" (or, rather, "by a man") "came death, by man" ("a man") "came also the resurrection of the dead. For as in Adam all die, even so in Christ shall all be made alive. But every man in his own order: Christ the firstfruits; afterward they that are Christ's at his coming." Again, the natural head of all men, Adam, and their spiritual head, Christ, are placed in the closest parallelism. ALL are said to have died in Adam, all to be redeemed from death in Christ. If we narrow the one term, we must equally narrow the other; in other words, we must deprive the Gospel of its most characteristic feature—its universality, its free offer of salvation and redemption to all. And so we find the main advocate of the opinion which we are here combating content to remit the majority of mankind to the uncovenanted mercies of God, and to argue that they may be salvable, through the application of Christ's atonement to them in some inscrutable way, like "the inhabitants, if there be any, of other worlds beside our own."

We here conclude the argument from particular texts, and pass to the more general consideration, What is the character of the texts on either side? Are they passages of (apparent) equal importance, equally bound up with the vital and essential portions of revealed truth, or do they not offer a remarkable contrast in this respect? Is it not clear that those which are adduced on the one hand are passages of (comparatively speaking) little moment, parenthetic, not necessary to the general narrative, while those brought forward on the other are manifestly of the opposite kind, containing either vital facts or vital doctrines? Again, is it not true to say that the meaning attributed to the one set of texts is not the *prima facie* one, does

not lie on the surface, while the meaning ordinarily given to the other is, and is admitted to be, that which the passages naturally suggest, and which consequently has to be explained away before another interpretation can be given? It may be true that, in the case of variant readings, "the more difficult one is to be preferred;" but this is certainly not the proper rule of interpretations. There, the easy, simple, plain, straightforward rendering is the best. "At the beginning of creation, God made them a male and a female;" "Eve was the mother of all living;" "God made of one blood all the nations upon all the face of the earth;" "by one man sin entered into the world;" "in Adam all died"—are passages where ambiguity is reduced to a *minimum*, and which can scarcely mean any thing but what they seem to mean. The exegesis cannot be regarded as worthy of acceptance which twists them into the following: "In the beginning of creation God made four varieties of mankind, each commencing with a male and a female" ("Genesis of the Earth and of Man," p. 64); "Eve was the mother of one only of the four races;" "God made the various races of men intermingle, and so by degrees become, more or less, of one blood;" "sin, which had been in the world for ages, entered by one man (Adam) into the world of Adam's descendants;" "death at the same time passed upon his descendants, thousands of men having previously died, each for his own iniquity."

It will scarcely be pretended that there is any traditional authority for interpreting Scripture as teaching any thing but the single origin of all mankind from Adam and Eve. No Jewish doctor, no Christian father, can be quoted as maintaining the descent of the human race from several separately created pairs; no such opinion can be found even among the heretical sects external to the church, who allowed themselves a freedom of speculation which the church forbade. It was characteristic of revelation, whether Jewish or Christian, that by deriving all mankind from one pair it established the universal consanguinity of the entire race; it made all men one family; it introduced into the world a principle of universal brotherhood and universal equality previously unknown; and it gradually forced this principle upon society, in spite of the most deeply-rooted prejudices and antipathies working the other way. Antiquity gen-

erally gave each nation a separate origin. Even petty tribes of Greeks claimed to be *autochthones* or *gégenes*, "sprung from the soil itself," or "earth-born." Each land not known to have been colonized had its *aborigines*, who were regarded as "sons of the soil," its natural produce, as much as the trees that grew there. Even when by some faint reminiscence of an old tradition a nearer approach was made to the truth, and a great deluge was said to have destroyed all but a single pair, a Deucalion and a Pyrrha, the whole value of the myth was lost by the intrusion into it of an alien element, and the story was made, instead of proving the consanguinity of mankind, to prove the contrary, since Pyrrha and Deucalion repeopled the earth by throwing stones behind them, which thereupon became respectively women and men. The Greeks generally, and even their philosophers, divided the human race into two portions, the barbarian and Hellenic, and maintained that the division had been made by nature and was indelible—the one being a race of masters, the other a race of slaves. The Greek race claimed, by virtue of this natural superiority, to rule despotically over all other nations, who formed (they thought) an inferior species of men. Their teaching was accepted by the Romans; who merely transferred the superiority claimed by the Greeks to themselves. It was the teaching of the Bible<sup>1</sup> that first shook, and then by degrees overthrew, this universal creed. Christianity, by proclaiming that all men were of one blood, all descendants of a single pair, preached the universal brotherhood of mankind. It at once admitted slaves to religious equality with freemen. It taught that "with God is no respect of persons,"<sup>2</sup> no distinction of "Greek or Jew, circumcised or uncircumcised, barbarian, Scythian, bond or free;"<sup>3</sup> and by diffusing these ideas and causing them to prevail it revolutionized society; it first mitigated slavery, and then banished it from among Christian nations; it gave a reality to what had previously been but a name—philanthropy; if it could not obliterate racial antipathies and hostilities, it checked them and considerably reduced their force; it brought the various members of the human family nearer

<sup>1</sup> The somewhat similar teaching of the later Stoicks was in all probability an unacknowledged appropriation of Christian doctrine.

<sup>2</sup> Acts 10:34; Rom. 2:11, etc.

<sup>3</sup> Col. 3:11.

together than they had ever been before, and made them know, if they could not be brought to feel, that they were really of one blood, relations, brethren, descended from one common ancestor.

If, discarding authority, we set ourselves to examine the question of the unity of the human race on the sole basis of reason and science, there will be difficulty in establishing a positive conclusion. Science has not yet laid it down with any thing like unanimity what are the distinguishing marks which constitute species, or made it possible to draw the line between a "variety" and a "species" with accuracy. The most generally received marks indicating unity of species are either such as cannot possibly be known to us historically, *e.g.* actual descent from an original pair; or such as admit of being estimated very differently by different minds, as, for instance, closeness of resemblance; or, lastly, such as would require, in the case of man, a long and difficult series of experiments to establish them, as universal reproductiveness. Thus, the nature of the subject precludes the adduction of positive proof; and we must be content to weigh against each other the arguments *pro* and *con*, and strike the balance as we find those on the one side or the other to preponderate.

The great diversity now existing among the various races of mankind is the primary argument urged in favor of a plurality of origin, and so a difference of species. The races of men differ, it is said, in color, in stature, in the quality of their hair, in the capacity and conformation of their skulls, in the structure of their skeletons, in the number of membranes forming the skin, and in their mental faculties and endowments. Some of these differences are slight, but others are very great and very important. They must be considered, not so much separately, as in the aggregate. Taken together, they constitute (it is said) an amount of difference such as is commonly held to be sufficient, in considering any other kind of animal, to separate the "kind" into "sub-kinds," the genus into distinct species.

First, it is said, consider color. Men are white, yellow, brown, black or tawny, and copper-colored or red. These hues do not pass one into another, but are distinct and sharply defined. They belong, not to individuals, but to races, and,

according to all existing historical record, were as pronounced in the remotest times as at the present day. No climatic influences, no change of diet or of habits, will turn a white man into a negro, or a negro into a white. Even the brown of a bronzed white is specifically different from the brown of an Abyssinian or a Malay. The sallowest European is not yellow, like a Chinese. Granting that the tint of a race may be gradually affected to a considerable extent by change of climate and habits, yet such change has limits, and limits that are not very wide. Black may be brought down to brown in this way—even, perhaps, to a lightish brown, but not to white; white may become tawny, brown, even perhaps a blackish brown, but never black. If we postulate a primitive pair, from whom are descended all the races of men, we must assign to that pair a certain tint, and regard the existing varieties of hue as all produced from that original tint, by the agencies of climate, soil, food, mode of life, occupation, and the like; but (it is argued) there is no tint from which all the existing varieties could have been produced in any period of time, however great, much less within the six or eight thousand years which the biblical chronology assigns to the existence of man.

Again, take stature. There are races, like the Patagonians, where the average height of the men is at least six feet; and others, like the Esquimaux, the Dokos of Abyssinia, and the Weddas of Ceylon, whose average height is between four and five feet. It is easy to conceive that the progeny of a pair who were of medium height might in some cases considerably exceed, in others fall short of, their primeval ancestors; but dwarfish *races* and gigantic *races*, it is said, seem more like distinct creations than varieties of a single family.

Great differences are also observable in the color and character of the hair of different races. The hair is black, brown, auburn, red, yellow or flaxen, and white. It is abundant or scanty; long or short; coarse and hard, or fine and silky; long, lank, and drooping, or stiff, curly, and crisp. Above all, it has been said the hair is in the negro a different thing altogether from that of other human races. Properly speaking, it is not hair at all, but wool, which is a distinct substance.<sup>1</sup> This feature

<sup>1</sup> On the difference between hair and wool, see Prichard's "Natural History of Man," pp. 101-104.

is thought to mark out the negro at any rate as a peculiar and separate stock, standing apart from the rest of mankind, and in all probability distinct in origin.

The capacity of the skull differs greatly in different peoples and nations. According to the most recent measurement, the average capacity of the ordinary European skull is 1500 ; of the Japanese, 1486 ; of the ancient Egyptians, 1464 ; of the Polynesians, 1454 ; of the Chinese, 1424 ; of the negro races, 1377 ; of the Hindoos, 1306 ; of the native Australians, 1283 ; and of the inhabitants of the Andaman Islands, 1220.<sup>1</sup> It is thought that here again we have an indication of distinct species of men, implying several distinct originations of the human race.

Again, the configuration of the skull is various. The skulls of some races are nearly circular, of others exceedingly oval. Their "facial angle" varies, being seventy degrees only in the negro, while it is eighty in the ordinary European. In some races the fore part of the skull, in others the posterior portion, has a remarkable development. Some skulls are "pyramidal," others not so. These differences, it is argued, are sufficient, either alone or taken in combination with others, to separate mankind into distinct species.

Though the human skeleton is identical, bone for bone, in all races of men, yet differences exist with respect to the proportions of the limbs and trunk, with respect to the shape of the pelvis, the straightness or crookedness of the leg bones, the flat or arched form of the "os calcis," the position of the "foramen magnum," and the like, which have been regarded by some as sufficient to constitute specific variety, and which must undoubtedly be admitted to tell in favor of the theory that men are of more species than one. On the other hand, it must be remarked that the differences are really somewhat slight, and are not to compare with those which separate the human skeleton from that of the animals approaching nearest to the human type.

The human skin, which is usually spoken of as if it were a single tissue, is really composed of several distinct membranes.

<sup>1</sup> See a paper read by Professor Flower at the meeting of the British Association for the Advancement of Science, held at Dublin in August, 1878.

It has been asserted that the number of membranes is not the same in all races of men, the negro having one—the “rete mucosum”—peculiar to himself, and wanting in the other varieties. This diversity has been regarded as constituting a really specific distinction, and marking out the negro from the rest of mankind as a different order of being.<sup>1</sup> If the fact were as supposed, the argument derived from it would be one of great importance, for “the endowment of an entirely peculiar organ to one race, of which no traces are to be found in the proximate tribe, is a much greater difference than is often to be found on comparing species which stand next to each other in the zoological series.”<sup>2</sup> But the progress of microscopical investigation has disproved the supposed diversity, and established the fact that the skin consists of three layers only—the epidermis, the “rete Malpighii,” and the cutis, and that these exist equally in all races of men, the difference between the negro and the white being simply that in the negro certain cells contained in the “rete Malpighii,” or intermediate skin, are filled with a dark pigment, while in the white the corresponding cells are empty. These cells, moreover, are in the white under certain circumstances filled with a pigment which may either be permanent or temporary—temporary as in freckles and in the areola mammareum, permanent as in moles, in congenital marks, and in other similar discolorations. Thus there is no such “organ peculiar to one race,” as supposed, and no ground for regarding the skin of the negro as differently constituted from that of the other varieties of man.

Finally, the different races of men are (it is said) so widely removed one from another in respect of their habits and modes of life, their sentiments, feelings, and sympathies, and their mental faculties and endowments, that it is impossible to conceive of them as all possessing one nature, all constituting one species, all the offspring of one and the same original stock. This argument derives its peculiar force from the remarkable contrast which is observable in this respect between man and

<sup>1</sup> See Flourens, “*Recherches Anatomiques sur le Corps Muqueux ou Appareil Pigmental de la peau, dans l’Indien Charma, le Nègre, et le Mulâtre,*” in the “*Annales des Sciences Naturelles,*” vol. vii.

<sup>2</sup> Prichard, “*Natural History of Man,*” pp. 84, 85.

the inferior animals. The habits of animals of the same species are uniform, or nearly so : one lion leads the same life as every other lion ; the same practices are observed in all hives of the working bee, in all communities of beavers, of black ants, of termites. If we know the habits of a single individual of each sex in any animal species, we know the habits of all ; we have no need of multiplying our observations ; enlarged experience does not lead to enlarged knowledge. But with man the case is wholly different. Civilized and savage life are two completely different things, and each of them has a hundred variant forms. No two races, no two nations, no two tribes, are wholly alike : each has its peculiarities ; and anthropology is the most multiplex of sciences. Can it be imagined that the civilized races of Europe, with their complex political organization, their diversity of trades and occupations, their manufactures, their machinery, their varieties of social life, their advanced art, their refinement, their profundity of philosophical speculation, are of one and the same species with the black communities of Central Africa, slaves grovelling beneath the yoke of a sorcerer king, with no art, no religion, no speculation, scarcely a tool, all leading identically the same life, and that a mere struggle to exist, by obtaining as food either some wild animal or by preference one of their fellow-men ? Are the meagre forms, mere collections of bones covered with a black skin, and crowned by physiognomies where flat noses, out-turned lips, and goggle eyes form an assemblage of features that is unspeakably hideous and repulsive—are these forms identical in type and origin with those which in ancient Greece served as models to Praxiteles, Phidias, and their fellows, and enabled them to produce the Venus of the Capitol, the expiring Gladiator, the Apollo Belvidere ? How is it possible to believe in the unity of origin of peoples so entirely diverse ? How is it conceivable that they can be members of one family, branches of one stock, joint possessors of one common nature ?

Such are the main arguments which reason supplies against the unity of the human race. They may be divided under the two heads of diversities in the physical structure, and diversities in the mental and moral organization. In both the differences are considerable ; and if they were universal, unchangeable,

indelible ; if certain marks belonged necessarily and always to certain races, and others to others ; if they were characteristic, more or less, of all the individuals in each ; if they had always belonged to the race so far as it could be traced back historically ; if they were plainly unaffected or only slightly affected by climate, locality, food, occupation, and other similar influences —they would constitute very strong evidence indeed of specific difference ; evidence which might possibly be overbalanced by other considerations, but which would possess in itself very great weight. Especially would this be the case if the diversities were cumulative, *i.e.* if a peculiar color, a peculiar stature, a peculiar kind of hair, a peculiar anatomy, a peculiar shape and capacity of skull, and a peculiar mental and moral condition went together ; if each race had its indelible mental and physical characteristics ; if there were no exceptions to the general rule—no shading off of the characteristics of one race into those of another, no indications of a possibility of transition from one whole set of characteristics to a different set.

But the very reverse of all this is the fact. Historically, it is certain that races have thrown off in course of time the whole mass of their moral and mental characteristics, have passed from the extremest degradation of savage life to the utmost refinement of civilization and the highest pitch of mental power, and, *vice versa*, from the amenities of civilized life and an advanced mental condition to the brutalities of savagery and barbarism. The capacity for improvement in man, his power of rising from a low form of existence to a high one, is a thought familiar to all ; his liability to degradation, though less generally recognized, is not less certain. The Copts, the Weddas, the modern Abyssinians, the modern Greeks, the present native races of America as compared with the former inhabitants of Mexico and Peru, are instances of decay and decline which sufficiently prove and illustrate the tendency of man under particular circumstances to degenerate. The degeneracy and improvement, which consist primarily in mental and moral elevation and depression, affect in most instances the physical characteristics also. As a race improves, the skull increases in capacity and becomes more elliptical in shape, the features soften, the hair grows less harsh, the muscles are better developed, the limbs

straighten, even the complexion tends to improve, *i.e.* to become more light.<sup>1</sup> Degradation is accompanied by similar changes, but in the reverse direction—by diminution in the volume of the brain and the length of the head, by a coarsening of the features and of the hair, by muscular deficiency, sometimes by crookedness in the legs, and by a darkening of the skin. In the Weddas, who seem to be descendants of the Aryan conquerors of India, we have most of these marks of degeneracy in a pronounced form.

Again, in every race there are individuals which do not possess the general characteristics, or at any rate are without some of them. Instances have been known of negroes gradually losing their black color and becoming as white as Europeans.<sup>2</sup> Europeans of pure breed have, on the other hand, grown to be black.<sup>3</sup> Among dwarfish races there are occasional tall men, and among tall races, like the Patagonians, some men who are short. Hair which has once been crisp may become lank, and *vice versa* lank hair may become crisp. As skulls increase in capacity and alter in shape between infancy and manhood, so it is thought by many, though perhaps not proved, that they may grow and change in after life. At any rate, it is admitted that in every race the form and size of the skull vary, oscillating between limits which are sometimes very wide indeed.<sup>4</sup> There is nothing that is really permanent or fixed in the characteristics of any race of men, nothing which is not more or less affected by climate, locality, food, occupation, etc., separately or in combination. A most striking contrast exists in this respect between the varieties of mankind and the species of wild animals, uniformity and unchangeableness of form and habits being the rule in the one case, diversity and changefulness in the other.

Moreover, in deciding the question whether men are or are not, all of them, of one species, it is necessary to take into account not only the points of difference, but also the points of resemblance. The decision should depend, not on the mere

<sup>1</sup> This follows from the *σκιατροφία*, or “seclusion from the sun’s rays,” practised by most refined races. (See Herod., iii. 12 and vi. 12.)

<sup>2</sup> Prichard, “Natural History of Man,” p. 85.

<sup>3</sup> *Ibid.*

<sup>4</sup> See Dr. Rolleston’s Address to the Anthropological Section of the British Association in 1875 (Report, part ii., p. 146).

number of the former, nor even on their seeming importance, but on the proportion borne by them to the latter. Now, it has been pointed out<sup>1</sup> that this is almost infinitesimally small. The period of gestation, the proportion of male births to female, the number and character of the bones forming the skeleton, the entire process of the animal economy (including such things as the laws of dentition, the period of maturity, the time at which the constitution undergoes other changes, the temperature of the blood, the total duration of life), and again the essential points of the mental constitution and powers, appetency and aversion, passions of various kinds, imagination, conscience, affection, reason, will, a perception of the ridiculous, a religious instinct, are the same or nearly the same in all the different races of men. All possess the power of communicating one with another by means of articulate speech. All produce and employ fire, manufacture tools, wear clothes to a greater or a less extent, possess arms, and domesticate some animal or animals. All, again, it may be confidently said—all *races* (that is to say, not all individuals) believe in a spiritual world, and look for a life beyond the grave. As “the father of anthropology” observes:<sup>2</sup> “We contemplate among all the diversified tribes, who are endued with reason and speech, the same internal feelings, appetencies, aversions; the same inward convictions; the same sentiments of subjection to invisible powers, and, more or less fully developed, of accountableness or responsibility to unseen avengers of wrong and agents of retributive justice, from whose tribunal men cannot even by death escape. We find everywhere the same susceptibility (though not always in the same degree of forwardness or ripeness) of improvement, of admitting the cultivation of these universal endowments, of opening the eyes of the mind to the more clear and luminous views which Christianity unfolds, of becoming moulded to the institutions of religion and of civilized life; in a word, the same inward and mental nature is to be recognized in all the races of men.”

<sup>1</sup> By Dr. Prichard (“Natural History of Man,” pp. 477–546).

<sup>2</sup> Prichard, “Natural History of Man,” pp. 545, 546. Dr. Rolleston says of him: “He has been called, and, I think, justly, the father of modern anthropology” (Address, p. 153).

It is evident that the argument here adduced has not merely a force which allows it to be used in diminution of the weight otherwise belonging to the statements and reasoning of those who dwell on the differences between race and race, but has a substantive value of its own. If it does not by itself actually prove that all human races are of one species and family, it tends very strongly in this direction. Resemblance of the individuals one to another is admitted to be among the most unmistakable marks of unity of species.<sup>1</sup> If we look below the surface, whether of the human form or of human life and manners, it is clear that there exists, beneath the apparent diversity, a deep-seated and essential similarity in all points that are of vital importance.

A second argument in favor of the unity of the entire human race, furnished by reason and science, is the following: Whatever may be the case in the vegetable world, it is a universal law of the animal creation that distinct species will not intermix. Only in cases where the animals are very closely allied, indeed, can sexual union be brought about; and in these cases it is comparatively seldom that such union leads to offspring. Where offspring results, where mules or hybrids are produced, the sterility of the half-breed is an almost certain consequence. In ancient times the parturition of a mule, when reported, was regarded as a prodigy;<sup>2</sup> while in modern, the fact of such parturition is discredited. If such an event ever occurs, it must be by the union of the hybrid with an individual belonging to one of the parent tribes. A hybrid breed cannot be perpetuated, since the union of hybrids with hybrids is invariably barren. This sterility, which is beyond all doubt an established fact, is said to have been secured by nature through the establishment of a really organic impediment.<sup>3</sup>

But in the case of the various races of man there is no impediment, no sterility. So far as we have experience, marriages between individuals of even the most diverse races are equally prolific with those between persons of the same race. The offspring of such marriages are not only not sterile, but are as

<sup>1</sup> See De Candolle, "Physiologie Végétale," vol. ii., p. 689; and compare Buffon, "Hist. Naturelle," and Cuvier, "Règne Animale," etc.

<sup>2</sup> See Herod., iii. 153 and vii. 57.

<sup>3</sup> Prichard, "Natural History of Man," p. 17.

capable of bearing children as any other persons. There is no need of reverting to one of the primitive stocks in order to continue the breed; where an intermixture of any two races has taken place, the children may intermarry without any danger of the marriages proving sterile, or indeed any less prolific than other marriages. Examples in point are the Griquas, a tribe of mixed origin, descended from the Dutch colonists of South Africa on the one hand and from the aboriginal Hottentots on the other; the Cafusos, a very remarkable race, known to have sprung originally from a mixture of native Americans with negroes imported from Africa; the bulk of the modern Mexicans, who are *mestizos*, half Spaniard, half Aztec;<sup>1</sup> and the mulattoes, who are half negro, half European. If any exception is to be made from the general rule of hybrid prolificness among the various races of men, it is said to be in this last case. But even here the utmost that is alleged is a *tendency towards sterility*,<sup>2</sup> which, if accepted as a fact, may be accounted for by other than physical causes.<sup>3</sup>

If the induction on which the above general conclusions are based were complete, if all possible intermixtures had been tried and all turned out prolific, the argument for the unity of the human race under this head would be an actual demonstration. Even as it stands, the argument is one of great force, since among the instances on which it is based are comprised races which differ as widely from each other in physical and mental characteristics as any that the world is known to contain. An induction based upon a few widely differing examples is confessedly of a value little inferior to a complete induction.

A third ground furnished by science for regarding the human race as one in origin is the argument from language. Comparative Philology is believed by some of its ablest professors (as Bunsen and Max Müller) to indicate, if not to establish as a fact, that all the languages of the world have been derived

<sup>1</sup> There are many smaller *mestizo* communities in the Northern States of America and in Canada, which maintain themselves without difficulty. (See Wilson's "Prehistoric Man," pp. 523-532.)

<sup>2</sup> Nott, "Hybridity of Animals Viewed in Connection with Mankind," pp. 379 *et seq.*

<sup>3</sup> The profligacy of the mulatto race in America is notorious, and sufficiently accounts for the tendency to sterility which has been observed.

from one<sup>1</sup>—a fact, if it be a fact, which can scarcely be reconciled with the theory of several distinct originations of mankind. It is perhaps premature to lay much stress upon this ground, since the conclusions of Bunsen and Max Müller are not universally accepted, and the science of Comparative Philology is still in its infancy; but as the most eminent names are at present on the side of unity, and as the progress of investigation seems to be constantly accumulating evidence in its favor,<sup>2</sup> while counter-evidence is not forthcoming to any thing like an equal amount, the argument would seem to be one which ought not to be omitted from such a review of the grounds of reason on either side as we are here making.

To summarize the argument from reason, while on the one hand the patent and superficial diversities of the various races of men, and the long persistence of some of their characteristics, as of the hue and hair of the African negro, which are found on early Egyptian monuments much as they exist at the present day,<sup>3</sup> would seem to favor the conclusion that mankind is divisible into really distinct species, which probably had different origins; on the other hand, the essential similarity of man to man which underlies the superficial diversity, the want of absolute permanence and universality in any characteristic, the known power of external circumstances to produce change, and the fact of the gradual blending of type with type by a gradation which is continuous or nearly so, tend strongly in the opposite direction, leading towards the belief that the different races of men are mere varieties of one species, which probably had one origin. This conclusion receives a certain amount of support from the phenomena of language, so far as at present investigated, which, in the opinion of those best qualified to judge, point to a derivation of all languages from one—the speech of the primitive stock. It is also very strongly confirmed by an argument of very great weight, the established fact that whereas real hybrids,

<sup>1</sup> Bunsen, "Philosophy of History," vol. ii., pp. 3-5.

<sup>2</sup> See Norton, "Prehistoric Man," p. 609: "The tendency of all investigation into the analogies discernible in the structure of ancient and modern, of living and dead languages, points towards the discovery of relations, heretofore undreamt of, even between languages seemingly most dissimilar."

<sup>3</sup> Wilkinson, in Rawlinson's "Herodotus," vol. ii., p. 146; second edition.

the offspring of animals differing in species, are barren, and a hybrid race impossible, "mankind, of all races and varieties, are equally capable of propagating their offspring by intermarriages; and such connections are equally prolific, whether contracted between individuals of the same or of the most dissimilar varieties."<sup>1</sup>

Thus reason tends, on the whole, very decidedly to support the conclusion which Scripture declares authoritatively to be the fact—that there was one, and one only, origination of man, and that the whole human race is consequently "of one blood," the offspring of common ancestors.

We have not thought it necessary in this review to take into account the theory of evolution as applied by its chief maintainers to the origin of man. Not being able to regard that theory as any thing more than an unproved hypothesis, or to see in the facts which geology has brought to light respecting mankind any evidence at all of its being true as applied to them, we have felt it unnecessary to encumber our pages with the consideration of the question how the different races of men would be related to each other under the Darwinian system. As, however, we find it boasted by the advocates of that system that it establishes the universal relationship of all the forms of animated life, and so creates a "universal brotherhood," transcending aught that the mind of man had ever imagined previously to its discovery, we may presume that the acceptance of it by a certain class will not weaken in them, but rather strengthen, the belief that an essential unity underlies all the diversities of the human race, so that every tribe or division of mankind is of kin to all the other divisions.

The progress of our inquiry has now, we conceive, cleared out of the way the notion, which was once very widely prevalent, that the collective body of mankind is made up of races essentially distinct and different, races which had differed from each other in their physical and moral nature from the first moment of their existence, and which would continue to differ so long as their existence should be continued. We may enter upon the

<sup>1</sup> Prichard, "Natural History of Man," p. 18. The learned writer goes even further than this, venturing to add, "If there is any difference, it is *in favor* of the latter" (*i.e.*, of the dissimilar varieties).

question of the duties of race to race with the assured conviction that all men are of one kind, of one blood, of one and the same nature ; that the differences between them are accidental, the results of circumstances ; that the so-called characteristics of race are in no case necessarily permanent, but in course of time may pass away and be succeeded even by their contraries. We may view even the most degraded tribe as containing within it the germs of better things, as having capacities for improvement and advance to almost any extent, as capable of rising through changes in its environment to the highest degree of civilization and refinement, even perhaps to a perfection which the world has not yet seen.

It will be generally admitted that the duties of man to man are to be determined either by the dictates of enlightened self-interest, or by the requirements of benevolence, or else by some reasonable balance and adjustment of the two. We propose to inquire, separately, what self-interest and what benevolence demand in the matter under our consideration. If the two lines of inquiry lead to opposite results, some difficulty may be found in coming to a definite conclusion ; but if the issue of each be the same, we shall be saved from all further trouble.

Self-interest, as understood by the mass of mankind, has very commonly led superior races in mixed communities to reduce inferior ones to the condition of slaves. When the people of Israel made the Gibeonites into "hewers of wood and drawers of water,"<sup>1</sup> they no doubt imagined that they were securing to themselves a benefit. And though philosophers have occasionally argued that the true ground of slavery was the benefit thereby accruing to the slave,<sup>2</sup> yet the real motive for its establishment and continuance has always been the supposed advantage which it procured to the slave-owners, and so to the community whereof they formed the principal or at any rate the ruling portion. It may perhaps even at the present day be thought by some that self-interest, taken by itself, does really recommend this course, and that the general abolition of slavery by civilized nations is a piece of self-sacrifice, due to public virtue and to the preference of moral over material considerations. But the best political economists are of a contrary opinion, and

<sup>1</sup> Josh. 9 : 21-27.

<sup>2</sup> Aristot. Pol., i. 2.

hold that slavery is not beneficial to the slave-owners even in a material point of view. The labor of slaves is inefficient and wanting in energy, since the slave has no interest in his work, and his object is to do as little as he can ; it is costly, through the amount of overseeing which it requires ; and it is unintelligent, since the slave has always to be kept down and prevented from acquiring mental power. Again, the existence of a slave-class tends to narrow the labor-market, to increase the consumers and diminish the producers in a community, since where such a class exists the idea of degradation is attached to labor, and therefore no one will engage in it who can possibly abstain. The " Mean Whites" of the Southern States, and the lazy Roman citizens with their perpetual cry for " Panem et circenses,"<sup>1</sup> are instances. Again, the existence of a slave class always constitutes a political danger. Besides the chronic evils of sporadic arson and murder inseparable from such a state of things, there is always the possibility of insurrection on a large scale, with its nameless accompanying horrors ; and where a state has foreign enemies on its borders there is the further danger that when war occurs the slave class will join the foreign foe. Perils of this last kind have been more conspicuous in ancient than in modern times, and in the Old World than in the New, *e.g.* in Rome and Sparta, where the War of the Gladiators<sup>2</sup> and the risings of the Helots brought the two states respectively to the verge of destruction ; but it cannot be supposed that such perils are really confined to any particular age or continent, since reason tells us that they are inherent in the very nature of the case, and that the circumstance of a nation having no foreign enemy to fear can only be exceptional and temporary. Further, slavery demoralizes the slave-owning classes by the temptations to promiscuous intercourse which it necessarily offers ; and such demoralization, though compatible with much individual courage, gallantry, and even heroism, does nevertheless by degrees emasculate and vitiate a race, rendering it physically weak and incapable of contending against its more moral neighbors.

If, on these or other grounds, the idea of reducing inferior races to the slave condition be abandoned, it has been thought

<sup>1</sup> Juv. Sat., x. 81.

<sup>2</sup> B.C. 73-71. (See Mommsen, " History of Rome," vol. iv., part i.)

by some that the wellbeing of the superior portion of the community requires, and even that nature favors, the getting rid of the obnoxious element by quiet, gradual extinction. It is not proposed to remove them by a "Sicilian Vespers" or a St. Bartholomew, an established system of Crypteia,<sup>1</sup> or even the Pharaonic method of a compulsory infanticide of the males.<sup>2</sup> No active steps are to be taken. "Leave them alone," it has been said, "and they will infallibly die out. They cannot accommodate themselves to civilized ways; and, if we do not officially make efforts to preserve them, they will die off before civilized man, as the wild animals die." Smitten by an inevitable law of decline and decay, they will dwindle and gradually disappear, their numbers becoming constantly less, until they are "civilized off the face of the earth." So, it is said, the Finns disappeared before the Aryan races in Europe and Asia, the Pelasgi before the Hellenes, the Celts before the Anglo-Saxons, the Tatars before the Russians; and so the aborigines of New Zealand, Australia, and North America are even now disappearing before the whites.

The solution is scarcely a satisfactory one which arrives at health by the loss of a limb, even though the limb be not amputated, but shrivels up and finally drops off, like the withered branch of a tree. A community should be able to find a use for all its members, and not look forward with complacency and hope to the extinction of several of the races composing it. No doubt there is a sort of rude justice in "the survival of the fittest;" but at best it is a stern law, and jars upon the divine sentiment of pity. Still, amid a complication of difficulties, it might be that such a solution was the best possible one, and that it was our duty to await it, were it sure to come; but in the case before us there is great reason to doubt whether the result predicted would in reality ever arrive. It may be true, it probably is true, that among the inferior races of man there are some which would, if we left them alone, accommodate us by effecting the "happy dispatch." As Mr. J. A. Froude observed in one of our recent numbers,<sup>3</sup> "The savage pines in

<sup>1</sup> Such as prevailed at Sparta. (See Thucyd., iv. 80; Plutarch, Lycurg., §28; Aristot., Fr., 80, etc.)

<sup>2</sup> Exod. 1:16-22.

<sup>3</sup> PRINCETON REVIEW, for May, 1878, pp. 908, 909.

his cage like the eagle. The imprisoned eagle will not mate and rear his eaglets ~~in~~ captivity : he waits, gloomy and solitary, for his own deliverance in death. So it is with the savage tribes : they recede before the white man into the wilderness, and perish as if stricken with blight." But this is not the fact universally. All races are not so accommodating as the native Australians and New Zealanders. As the same writer goes on to observe : " Utterly unlike such races is the African negro. The negro takes to domestication as kindly as the duck to water. . . . He does not pine, like the Sioux or the Delaware, for the wild freedom of the forest, and die if it is taken away from him. He is happy enough when he has enough to eat, and he multiplies his little black olive-branches at a rate which might make Malthus turn in his grave. What is to become of him ?" Clearly, if we simply leave him to himself, he is not likely to die out. He will obey the command to " increase and multiply " in the most exemplary fashion. As in the United States the 375,000 or 400,000 imported Africans<sup>1</sup> have grown to be four millions, and even in Hayti, with all its disadvantages, the 700,000 souls of 1791 have become 950,000 in 1878; so, wherever the negro finds a suitable climate, he will rear a numerous progeny, and multiply as fast as the Irish Celt or the Polynesian Islander. As time goes on he will be an increasing difficulty. The problem will not solve itself by our sitting still.

Another inferior race, which is everywhere insinuating itself into civilized communities and taking up a more and more important position, is that of the Chinese. Like the negro, the Chinaman takes kindly to domestication, does not " pine " when away from his home, and, unless the necessities of life are very hard to obtain, multiplies at an alarming rate. Here, again, is an inferior race which cannot be got rid of by the *laissez faire* system.

It is not even certain that such races as the Red Indians, the Australians, or the New Zealanders can be depended upon, if left alone, to commit suicide, and cease to inconvenience their civilized fellow - citizens by kindly effacing themselves. Recent investigation in America has shown that the disappearance of the Red Indians, so far as it is a fact, has been caused,

<sup>1</sup> " Compendium of the Seventh Census of the United States," p. 13.

not by the mere process of natural decay, but in a very different manner. The race has disappeared and is disappearing mainly through absorption.<sup>1</sup>

It will be our duty presently to consider whether this is not the true remedy for the existing difficulties, the end at which enlightened statesmanship should aim, if not in all, at any rate in the majority of cases, where the inferior race or races constitute a small minority, a mere fraction of the community. But before addressing ourselves to this question there are one or two other suggested modes of dealing with the matter, on which we must say a few words.

It has been proposed to meet Chinese immigration in California, Australia, and elsewhere by prohibitory enactments, and to clear off the negro population from the United States by deportation to Liberia. A society has even been enrolled to effect the latter object. Thus, it is said, the imposthume forming in one part of the American body-politic might be prevented from growing any larger, and the gangrene affecting more or less the entire community might be excised. Self-interest, the true well-being of the whole community, requires that action should at once be taken to arrest dangers that are imminent, and the above-mentioned measures are supposed to be the best adapted to the purpose contemplated.

To us it appears that the true interest of the States would not be promoted by either measure. The chief drawback on the commercial prosperity of the Great Republic is the dearness of labor, which cramps agriculture, cripples manufactures, and leads to unwise attempts at meeting the competition of countries where labor is cheaper, and bolstering up an unnatural industry by the antiquated policy of Protection. One of the chief drawbacks on domestic comfort is the difficulty of procuring servants, or at any rate servants in whom any trust can be reposed, since the mulattoes and mestizos, whose services may generally—not always—be obtained, are for the most part unintelligent, lazy, and of loose morality. The Chinaman is industrious, patient, clever, docile, able and willing to turn his hand to any thing; not perhaps over-moral, but immoral in a quiet way;

<sup>1</sup> See the very interesting chapter entitled "Red Blood of the West," in Dr. Daniel Wilson's "Prehistoric Man," ch. xxii., pp. 513-558.

he works upon terms which even the Irishman despairs ; and his competition is the only thing which keeps down the price of labor to its present rate, and prevents it from running up to a figure sufficient to make capitalists tremble. The Chinaman is an excellent servant, hard-working, contented, cheerful ; he cooks capitally, is economical, and seldom asks to have his wages raised. Thus, the coolie immigration is of advantage to America in two ways : it keeps down the average price of labor in the market, and it supplies to a certain extent one of the greatest wants of the country—the want of good servants.

No doubt, it is conceivable that the immigration, if it become very much larger than it is, might prove an inconvenience. But we do not think there need be much apprehension on this score. China has, indeed, a vast population, though not a population so vast as is generally imagined.<sup>1</sup> The density of the population is not nearly so great as that of several countries in Europe. There is at present, after centuries of stagnation, a stir of the dull waters and an inclination to try life in foreign countries ; but we doubt whether the experiment will ever be made on a large scale. A Chinaman sacrifices much when he quits his home : he leaves his wife and children behind him, and is always contemplating a return to them. What tempts him to roam is the hope of a large gain ; and this hope will die away as America becomes more thickly peopled and the rate of wages declines. China itself may also pass into new hands, and an enlightened government evoke such energies and produce such prosperity at home that it will be easy to obtain the comforts of life without wandering abroad. Should such a change occur, the Chinese would probably again become stay-at-homes, and no longer trouble foreign nations by their unwelcome advent in large numbers.

Should this forecast prove wrong, should the immigration greatly increase, should the Yang-tse-Kiang and the Hoang-Ho set themselves determinedly to pour their floods into the Sacramento, it will be time enough to take precautions when the danger is an immediate one. At present we are of opinion that

<sup>1</sup> All recent inquiry has tended to bring down the probable number. It has been stated at 414,000,000, but is now generally regarded as about 300,000,000.

no repression is needed, since the States really derive, on the whole, an advantage from the coolie settlers.

The scheme of deporting the negro population of the United States to Liberia is one we could scarcely have supposed would have ever presented itself to a practical people. The expense of the removal would be enormous, the derangement of the carrying trade which it would involve extreme, and the further outlay necessary for the support of the settlers until they could safely be left to themselves very considerable. Moreover, two consents would have to be obtained before the scheme could be carried out, neither of which can be counted on. The consent of the small community of Liberia to receive an influx of four millions of (chiefly) uneducated persons, recently slaves, and very helpless, is scarcely to be anticipated with any confidence; while the consent of the American negroes themselves, just raised to the rank of citizens and proud of their newly-acquired position, to expatriate themselves, exchange the known for the unknown, quit the land of their birth and bringing up for that of their remote ancestors, is most improbable. Liberia never possessed much attraction for the emancipated negro, when he felt himself an alien and an outcast, with no prospect of advancement before him in America. How should it now have greater charms, when all political disabilities are removed, when all careers are (formally, at any rate) open to him, and he may rise to be a representative or a senator, a judge, a general, an ambassador, the governor of a State? Had the deportation been proposed to the black race prior to 1865, there might have been some chance of its acceptance, but now the time for it is gone by. We question if the new society will find itself able to send out a hundred emigrants a year. And if such a number, or even a larger number, were sent out, what is to prevent them from returning?

No; the negro element in the population of the United States will never be persuaded to uproot itself and submit to voluntary transplantation. For good or for evil, it will remain a *crux* for politicians to deal with, a problem for philosophers to discuss, a difficulty for practical persons to make the best of. What is that "best"? To us onlookers at a distance, entirely disinterested spectators, it seems that amalgamation is the true

remedy, and ultimate absorption of the black race into the white the end to be desired and aimed at. We are quite aware that such a proposal will evoke much opposition, elicit much "tall talk," call forth not a few sneers. It will be said to be a cheap humanity to recommend to others sacrifices which the recommenders cannot be called upon to make themselves. It will perhaps be suggested that British jealousy of American greatness is at the bottom of the advice tendered, and that England would gladly see the American race deteriorate under the influence of an intermixture with the negro. We can only say that we are unconscious of any such motive ; that we do not believe the American race would be sensibly deteriorated by the process ; and that, if there were a slight deterioration, it would in our opinion be amply compensated by the removal of all the jars and jealousies, the exasperation and the ill-blood, which at present result from the established isolation of the two races.

It is a general rule, now almost universally admitted by ethnologists, that the mixed races of mankind are superior to the pure ones. In the earliest ages to which history goes back, the two most important nations were those of the Egyptians and the Babylonians. Many suppose these to have been pure races ; but the contrary is the fact. The physical peculiarities of the ancient Egyptians, whether as depicted upon their monuments or as seen in the mummies of Pharaonic times, are indicative of a people half Caucasian, half Nigritic, with perhaps other slighter intermixtures. "The form of the head and the features of the face are of a modified Caucasian type, approaching to that which is known as the Syro-Arabian, but inclining in the general cast, and particularly in the nose and lips, and in the soft and languid expression of the eye, to the negro character.

. . . A similar degree of resemblance to the negro is also observable in the body and limbs, more particularly in the legs and feet."<sup>1</sup> The character of the language is composite. "It consists of elements resembling those of the Nigritian languages and the Chinese language on the one hand, and those of the Semitic languages on the other."<sup>2</sup> The grammar "presents striking affinities with the Indo-Germanic" (or Aryan) "and

<sup>1</sup> "Genesis of the Earth and of Man," p. 168.

<sup>2</sup> Stuart Poole, in Dr. Smith's "Dictionary of the Bible," vol. i., p. 501.

Semitic tongues."<sup>1</sup> It is manifest that three or four of the principal races of mankind—the Semitic, the Negro, the Indo-Germanic, and perhaps the Turanian—were intermixed in order to form the great Egyptian people.

Similarly, in Babylonia, the early people, which exercised dominion over Western Asia prior to the rise of the Assyrians, was a mixed race. "Upon an ethnic basis, which was Cushite or Ethiopic, was grafted, at a very early period, a second, probably Turanian, element, which very importantly affected the character and composition of the nation ;"<sup>2</sup> while "besides these two main constituents . . . there is reason to believe that both a Semitic and an Aryan element existed in the early population of the country, which ultimately blended with the others."<sup>3</sup> The result was that "the Chaldæans were not a pure, but a very mixed people."<sup>4</sup> The people of Nimrod had in its veins Cushite, Turanian, Semitic, and even to a small extent Aryan blood. Its early dominion is an indication that mixed races are stronger than pure ones.

Much the same may be said of the Greeks. Greece, before the rise of the Hellenes to power, was inhabited by a number of barbarous or semi-barbarous tribes and nations—Pelasgi, Seleges, Caucônes, Dolopes, Dryopes, Carians, and the like—of whose ethnic character it is difficult to state any thing positively, except that they were not Greeks.<sup>5</sup> These races faded away and disappeared before the Hellenes ; but they were not extirpated : they were assimilated and absorbed.<sup>6</sup> Nor was this all. After the Hellenes had become predominant, they received and assimilated various bodies of foreign settlers—Egyptians at Athens and perhaps at Argos, Phœnicians at Thebes, Phrygians in the Peloponnese. Thus their original purity of race was largely infringed upon, and in the historic times they were a mixed people, containing (besides Hellenic) Pelasgic, Carian, Phœnician, and Phrygian blood, not to mention other less important infusions. We cannot, of course, prove that their great mental

<sup>1</sup> Brugsch, "Histoire d'Egypte," p. 6.

<sup>2</sup> Rawlinson, "Ancient Monarchies," vol. i., p. 68, first edition.

<sup>3</sup> Ibid., p. 69.

<sup>4</sup> Ibid., p. 70.

<sup>5</sup> Grote, "History of Greece," vol. ii., ch. ii., pp. 43-48.

<sup>6</sup> Herod., i. 58 ; Thucyd., i. 3.

and physical superiority to almost every other people was owing to the fact of their mixed character, but at any rate the instance tells strongly in favor of mixed as against pure races.

But the most striking example which antiquity furnishes of the superiority of a mixed race is to be found in the history of the Romans. Livy says, in his rhetorical manner, that the Romans were a “*colluvio omnium gentium*.” Of Latin blood originally, they early received a large Sabine infusion, while subsequently they absorbed at each step of their growth some new and diverse nationality—Oscans, Nubians, Etruscans, Ligurians, Hellenes, Gauls—until they came almost to deserve the title which Livy gives them, the Latin blood that formed the basis of the stock becoming deeply mingled with that of every people which had its home within the Italic peninsula, and more slightly with the blood of certain other races whose true seat was outside Italy. A recent historian, it is true, belonging to a people which prides itself on being pure, denies, or seems to deny, the mixed nationality of the Romans;<sup>1</sup> but even he directly admits the early reception of a large Sabine element,<sup>2</sup> and when he comes to the history of the Roman conquests, he cannot deny that race after race was absorbed, that nationality after nationality disappeared,<sup>3</sup> so that his assertion of the purity of the Roman stock can only apply to the Roman people at the beginning, and not to that race which, issuing forth from Italy in the first and second centuries before our era, contended with and conquered the world. The sound judgment of Niebuhr has expressed the truth when he says, “To no glory had the Romans less claim than to that of being an original and peculiar people; if they belonged to no nation, it was only because, as even their fables and disfigured legends afford us the means of perceiving, *they arose from the coalition of several that were wholly distinct from one another*. Each of these left its peculiar inheritance of language, institutions, and religion to the new

<sup>1</sup> Mommsen, “History of Rome,” vol. i., p. 45 (Dickson’s Translation).

<sup>2</sup> Ibid., p. 46.

<sup>3</sup> Ibid., p. 466: “At this epoch the neighboring bands, Southern Etruria, Gabina, the land of the Volscians, and even Campania began to become Romanized,” etc.

people, which, in the complex of its national character, was assuredly always unlike any of its parent races."<sup>1</sup>

Even the Jews, who are so often cited as an example of a race at once pure and strong, may with more reason be adduced on the opposite side of the argument. In the first century of our era Apion taunted them<sup>2</sup> with being a conflux of outcasts from all the nations of the world. The taunt rested upon fact. From the first the children of Israel readily intermarried with women of alien races. Judah and Joseph certainly,<sup>3</sup> and the other sons of Jacob probably, had foreign wives. Moses married a Midianite, and perhaps afterwards a Cushite.<sup>4</sup> David took to wife a Geshurite princess (2 Sam. 3:3); Solomon had among his wives and concubines "many strange women, women of the Moabites, Ammonites, Edomites, Zidonians, and Hittites;" he was also wedded to an Egyptian (1 Kings 11:1). Rehoboam and the other kings of Judah were descendants of "Naamah, an Ammonitess" (1 Kings 14:21). In the days of Ezra and Nehemiah, the practice of "taking strange wives" became general; and though great efforts were made by those reformers to check the custom (Ezra 10:1-44; Neh. 13:23-30), it continued, and half-castes became so numerous that a new language sprang up among them (Neh. 13:24). Moreover, the Jews at all times freely admitted "proselytes of righteousness," of whatever race they were, into their nation, and reckoned them as much Jews as those whose unstained descent from Abraham and Sarah was unquestionable. It was probably through a large addition to their numbers from this source that the "seventy souls" of Jacob's stock, who went down into Egypt,<sup>5</sup> became the "six hundred thousand" who went forth from that country four hundred and thirty years afterwards.<sup>6</sup> Apion said (and Niebuhr echoes his assertion) that "much the largest part of the Jews in Palestine and Egypt" at the time when he wrote (about A.D. 20-50), "were not sprung from the small colony sent back into Judæa under the Persians, but from

<sup>1</sup> "History of Rome," vol. i., p. 6 (Hare and Thirlwall's Translation).

<sup>2</sup> See Joseph., *Contr. Apion.*

<sup>3</sup> Gen. 38:2; 41:45.

<sup>4</sup> Ex. 2:21; Num. 12:1.

<sup>5</sup> Gen. 46:26.

<sup>6</sup> Ex. 12:37-41.

individual proselytes."<sup>1</sup> The Falashas, or "Black Jews of Abyssinia," are thought to be wholly "descendants of proselytes to the Jewish faith."<sup>2</sup> The same is said to be the case with the "Black Jews of India."<sup>3</sup> Thus, in spite of all that has been vaunted of the pure Caucasian descent and unmixed blood of the "peculiar people," it is probable that there are few existing races in which so many bloods meet.

Such are some of the most striking examples which antiquity furnishes of the physical and mental excellence of mixed races. In modern Europe, the relative position, intellectual and political, of the leading nations repeats the lesson which antiquity teaches and deepens it. There are five European peoples, and five only, which have large political influence, while at the same time they hold an important intellectual position and make valuable contributions to literature and science. These are the English, the French, the Germans, the Russians, and the Italians. Of these five races two claim to be pure. The German will have it that he is an unmixed Teuton, the Russian that he is an unmixed Slave. History admits neither claim. History tells the Russian that his ancestors largely intermingled with the Tatars, who once exercised dominion over his land, and that more recently his nation has received and absorbed into itself Finnish, Lithuanian, and Teutonic elements. History tells the German that from remote times there was a Celtic element in his country,<sup>4</sup> which has disappeared by absorption, and that he has swallowed up in his capacious maw, during the last two thousand years, many minor nationalities. Nevertheless, it may be granted that the Russians and the Germans are, *comparatively speaking*, pure races. But no one can doubt that the three other leading nations are of mixed descent.

The French have a substratum of Celtic blood, which constitutes probably the predominant element in their composition;<sup>5</sup> but upon this substratum have been superimposed, first, a large Greco-Roman element, the result of Greek colonization and Roman conquest; secondly, a considerable and most important

<sup>1</sup> Niebuhr, "History of Rome," vol. i., note 1.

<sup>2</sup> "Genesis of the Earth and of Man," p. 114.

<sup>3</sup> *Ibid.*, p. 113.

<sup>4</sup> Tacit., *Germania*, § 28.

<sup>5</sup> Michelet, "Histoire des François," vol. i.

Teutonic admixture, by the settlement in the country of German tribes, Franks, Burgundians, and others ; thirdly, a Scandinavian element, through the invasions of the Northmen, which fell with more or less force upon the north, the west, and the south, but chiefly upon the north, which thence acquired the name, that it still bears, of Normandy. The French are thus a compound of four races at the least ; it would not be difficult to show that they contain also most probably a Finnic ingredient.

Englishmen are sometimes said to be Saxons or Anglo-Saxons, as if they were of one blood only. But the truth seems to be that of all modern races they are the most mixed.<sup>1</sup> The Finnic ingredient, which may be suspected in France, is distinctly to be recognized in the British Islands, where a short, squat race with dark complexion and dark hair has been largely intermixed from very remote times with the blue-eyed, fair-skinned, and flaxen or red-haired Celts. Upon this intermixture supervened the Roman occupation, which lasted about three centuries and a half, and must have left behind it a certain ethnic effect, though not a very sensible one. A fourth element came in when the Angles, Saxons, and Jutes effected their settlements in the east and south, intermarrying with the native women, while they for the most part exterminated the men. At a later period the Danes brought in a strong Norse infusion, which is distinctly traceable in the east and north ; while subsequently a second Norse element, but one much altered by its sojourn in Romanized France, came in with the Norman conquest. Nor did the process of intermixture stop here. Ever since the Conquest, England has been an asylum for fugitives, the common refuge for the persecuted of all nations. Lombards, Flemings, Jews, French Huguenots, Germans, Poles, have flocked to the British Islands in large numbers, have been freely received, and have all, more or less, united their blood with that of the previous inhabitants. Moreover, the cosmopolitan habits of Englishmen have introduced into the British nation small admixtures of Armenian, Greek, Hungarian, Hindoo, Chinese, and even Negro blood ; so that there is

<sup>1</sup> Wilson, "Prehistoric Man," p. 559.

scarcely a race in the whole world to which the modern Englishman is not, to some extent, allied.

The Italians have succeeded to that entire inheritance of mixed blood which was left them by the Romans; while, in addition, they have received a number of new elements. The invasions of the Huns and Vandals may have left, indeed, little trace behind them; but it was otherwise with the Goths and Lombards in the north and with the Normans in the south; and it was otherwise with the Germans, who, from Charlemagne to Francis Joseph, dominated the peninsula throughout its whole extent. The Italians of the Roman period have received a large Teutonic and a considerable Norse infusion; they also, at the conquest of Constantinople by the Turks, gave a refuge to a numerous body of Greeks; moreover, since that time their constant commerce with the East has brought in slight admixtures of other, more remote, nationalities, so that the Italian of the present day, in his mixed descent, rivals at any rate, if he does not surpass, the Englishman.

But, it may be said, granting, as a general rule, the superiority of mixed over pure races, is it therefore to be assumed that all mixtures are advantageous, that there is no limit which ought not to be transgressed, no race union with which ought not to be shunned as almost certain to produce deterioration? And, if there be any such races, is not the Negro almost certainly one of them, and ought not his blood to be avoided, as much as a poison or a pestilence? Attempts have been made recently<sup>1</sup> to distinguish the races of men into two classes, the *allied* and the *repellent*, and to argue that the advantages of union are confined to the former, while if the latter intermix the result is unsatisfactory. But the theory of "repellent races" is based on no sufficient induction. That no *feeling* of repulsion which is not easily overcome divides the white race from the black, is clearly evidenced by the fact that in America—even under present circumstances—the mulattoes exceed in number the pure negroes. That, apart from feeling, there is a latent natural antipathy, which shows itself in unproductiveness, or unhealthiness of the offspring, and so in a tendency to die out, is at any rate

<sup>1</sup> Among others, by Dr. J. C. Nott. (See his "Hybridity of Animals," p. 379, and his "Types of Mankind," p. 61.)

not proved at present. Even if it be true that the offspring of mulattoes, when kept apart from the parent stock, deteriorates, it is admitted that there is no deterioration when mulattoes intermarry with whites. The quadroon is, by general consent, of a splendid *physique*, and of fair average mental power. "When the grade of *quinteroon* is reached, the negro type has disappeared" altogether.<sup>1</sup> If the present black population of America intermarried freely with the whites, the grade of *quinteroon* would be reached generally within a century.

Still, it may be urged, it is not pleasant to take a leap in the dark. Is there any evidence from history that the negro can be absorbed and assimilated, and that the result is advantageous, or not disadvantageous, to the absorbing community?

Certainly, not much evidence is forthcoming. The negro in his native land has but seldom been brought into contact with white races; and when such contact has occurred, amalgamation has but very rarely followed indeed. The white man has for the most part kept himself aloof: he has denied the black man's brotherhood, has degraded him to the slave condition, and aimed at coining his blood into gold. Outside Africa, the treatment of the negro has been even worse; and in the only case in which there was an opportunity for amalgamation—the case of Hayti in 1795—the colored race, suddenly freed from restraint, let passion rather than reason guide them, and massacred or expelled their white oppressors. Still, there is not an absolute lack of evidence. We have already noticed the case of the ancient Egyptians, the strongest and most civilized people of the primeval world. In Egypt, a white Caucasian race of incomers did not disdain to mix its blood with the native Nigritic element, and the result was a type of man of fair general *physique*, with a capacity of skull not much below that of the modern European,<sup>2</sup> and with great mental ability. The Pyramids, the rock-tombs of Thebes and Memphis, the temples of Luxor and Karnac, exist to show what a hybrid nation, half white, half negro, could effect in architecture. Linguistic investigation tends more and more each day to prove that

<sup>1</sup> Wilson, "Prehistoric Man," p. 577.

<sup>2</sup> The capacity of the ancient Egyptian skull is reckoned at 1464, that of the average European at 1500.

results scarcely less surprising were arrived at in science and literature.

In Egypt, the Nigritic element was large, and the physical type was considerably affected by it. In another Eastern country, where white blood preponderated, a Nigritic race, "black-skinned and woolly-haired," on the evidence of an eye-witness,<sup>1</sup> has been gradually absorbed and assimilated, so that now no trace of it is left. The "black-faced" Colchians of Pindar<sup>2</sup> are lost in the modern inhabitants of Imeritia, who are a fine people, "of European features and form,"<sup>3</sup> noted for the beauty of their women, which is said to exceed that of the Circassians.<sup>4</sup> In America the absorption of 4,000,000 by 36,000,000 might be expected to result similarly in the disappearance of the lower type altogether.

Yet another question may be asked. Since the absorption of the negroes by the whites could not but in some respects, and for a time, tend towards a deterioration of the stock, what, it may be said, are the compensatory advantages which might be expected to flow from it? Can they be pointed out? If not, might it not be a wiser course for the American people to "bear the ills they have," rather than "fly to others that they know not of"?

We reply, There would be two compensations. The *great* compensation would be the removal of all those jealousies, suspicions, heartburnings, complaints, grievances, which at present divide and estrange the black population from the white, splitting up the American people into two antagonistic nationalities, between which there may be an armed truce, but never any real hearty agreement. It would be worth paying a heavy price to get rid once for all of the great Negro difficulty, to establish practically the equality and brotherhood which are now preached by all but practised by few, to weld the present jarring elements into a really accordant and united whole. This would be the main benefit of the course recommended.

But it might also, we think, be counted on to improve in certain respects the mental and moral temperament, if not the

<sup>1</sup> Herod., ii. 104.

<sup>2</sup> Pindar, Pyth., iv. 738.

<sup>3</sup> Prichard, "Natural History of Man," p. 256.

<sup>4</sup> Reineggs, "Beschreibung des Caucasus."

physical characteristics, of the "Euromerican" race.<sup>1</sup> Like their Anglo-Saxon progenitors, the Euromericans are of an over-serious disposition, taking even their pleasures "sadly." It would be a gain were something of the lightheartedness, the gayety, the *abandon* of the negro to be infused with his blood into the white population; were the contentedness and *insouciance* which characterize him, and make him seem a sort of grown-up child, a little to temper the far-seeing prudence and keen, calculating activity which among the whites are developed in an undue degree. It might not be a bad thing if the religious ardor of the negro lent some of its warmth to the tepid devotion far too common wherever Anglo-Saxon blood predominates, and his ready faith counteracted the cynicism and distrust which have unfortunately taken possession of all highly civilized white people. There might be other advantages beside these, for some of the best results of "crossing" have often been such as could not have been anticipated; but these at any rate seem to us beneficial consequences which might be reasonably expected to follow upon the intermixture in question.

On the whole, therefore, we conclude that self-interest points out to the Americans, and to all other nations similarly situated, that their aim should be to absorb and assimilate the inferior races with which they are brought into contact, to fuse the different bloods into one, and become as soon as possible a united, homogeneous people. Let this course once be recognized as what true patriotism dictates, and the social bars, the miserable caste prejudices and distinctions which at present keep the races apart, would rapidly disappear. Mixed marriages would become as common as are now mixed unions of a less moral kind; the white blood, which is to the black as nine to one, would in each generation more and more preponderate; and before a century was over only the skilled physiologist might be able to perceive the existence of a Nigritic element in the composite nation.

But if self-interest points this way, still more strongly does benevolence. No more happy fate can befall an inferior race, especially if it be a race on which the circumstances of its past existence have set a stamp of physical inferiority, than to be absorbed

<sup>1</sup> I take this term from Dr. Daniel Wilson ("Prehistoric Man," p. 6).

into one more fortunate in its antecedents, far above it physically, morally, intellectually. The process may be described as extinction, as ceasing to be. But it is at any rate a euthanasia. It is a death out of which life springs. The stock which, if kept separate, might have dwindled and died, and at the best could only have gradually raised itself by slow and painful effort in the course of many centuries to an equality, or a *quasi*-equality, with its neighbor, is carried rapidly, almost at a bound, to civilization, to refinement, to intellectual power. It ceases to exist as a separate stock ; but it becomes an element in the composition of a great people. It obtains a full share of the mental and moral treasures inherited by the present from past ages. And it gives something in its turn. It contributes to the common fund of national qualities some important traits. It is a factor in the result arrived at. Whatever point of mental advancement, whatever perfection in morals and in art, whatever height of fame and earthly glory the mixed race may reach, each element—even the lowest—may claim its part in them.

As it thus appears that one and the same course of conduct is prescribed, in the matter before us, by both self-interest and benevolence, it is unnecessary to pursue any further the present investigation.

GEORGE RAWLINSON.

## ECLIPSES OF THE SUN.

TO the unaided vision the appearance of the sun is suggestive only of calm and enduring quiescence : the first man who ever looked upon it saw in it only the same effulgent globe which we see at the present time. If every generation which has seen it could have handed down to posterity its image as it appeared to them, not the slightest trace of change could be discovered by the most careful examination ; not a solitary deviation from perfect roundness of form would ever have been seen ; nothing suggestive of motion or change upon its surface would ever have been noted, except perhaps at very rare intervals the appearance of a spot so minute that the eye could scarcely discern it.

We now know that this appearance of quiescence is entirely an illusion arising from our immense distance from the luminary, and that the sun is really a theatre of operations going on on a scale so stupendous as to transcend all our conceptions. Its earthquakes extend over thousands of square miles and bury its whole surface in a chasm of liquid fire ; the craters of its volcanoes open widely enough to engulf the earth, and throw up flames fifty thousand miles high ; its hurricanes sometimes blow one hundred or even two hundred miles in a second, and would instantly reduce any terrestrial matter they might strike to a fiery cloud. But before we reach a distance of ninety-two millions of miles, our earth would to the unaided vision vanish into a point too small to be visible ; the sound of the convulsion, terrific though it must be on the sun, cannot penetrate the vacuum ; the flames which surround it are lost in the effulgence of its surface, and thus it happens that, stupendous

though the movements are which are going on at the surface of the sun, they have been discovered only by a long and arduous series of observations.

It is perhaps not too much to say that the origin of all we really know of the physical constitution of the sun and of the extraordinary changes going on upon it is due to the occasional occurrence of total eclipses. For although the observations made during total eclipses are not now the most important ones, although the spectroscope may reveal to us the flames surrounding the sun on any perfectly clear day, yet it is very doubtful if a hint of the mode of using the spectroscope would have been obtained had not these surroundings been exposed to view during the rare moments of total eclipses. We thus have the seeming paradox that most of what we have learned respecting the physical constitution of the sun has been gained by the hiding of it from view.

It is very curious that the apparent diameters subtended by the sun and moon are so nearly equal that a total eclipse of the sun is barely possible. Had the diameter of the moon been by a very small amount less than it is, or had the moon been placed a little further from the earth, or had the diameter of the sun been a little larger than it is, such a phenomenon would have been entirely impossible ; the eclipse of the sun would have been only partial or annual, and the opportunities for studying the surroundings of the sun which total eclipses have given us would never have been enjoyed. As an introduction to what we have to say on the subject, a general account of the progress of an eclipse will not be out of place. The circumstances have first to be foretold from the astronomical tables of the sun and moon. The breadth of the dark shadow of the moon as it passes over the earth does not often exceed one hundred or one hundred and fifty miles, and it is necessary to know just where this shadow will pass in order that observers may station themselves near the centre of its path. An exaggerated estimate of the accuracy which has been obtained in this direction is often made by men of intelligence, and even by those well versed in astronomy. That the path of the shadow over the earth can be marked out at all, years beforehand, is an intellectual feat so extraordinary, that when the

possibility of doing it is once demonstrated the ordinary mind is quite ready to accept almost any idea of what can be done. Thus it is often thought that the predictions of the astronomer are so unerringly accurate that the most careful observation can show no deviation, and that the time of the eclipse can be predicted a century in advance with the accuracy of one or two seconds. Now the fact is that the time of the late eclipse as predicted was nearly one half a minute in error, while the actual path of the shadow was some ten miles from the predicted one. This does indeed show the errors of the tables of the moon, but it is an error the existence of which has for some time been known, and which we hope will be before long corrected.

The observer, having placed himself, as nearly as he can judge, where the centre of the shadow shall pass over him, looks at the appointed time for the first contact of the moon on the disc of the sun. Up to this moment not a sign of what is coming can be perceived, the sun presenting exactly the same aspect that it always does. I do not think one ever observes an eclipse for the first time without feeling a slight incredulity as to what is coming during the few seconds which precede its first appearance, but after repeated experience of the certainty with which the prediction is fulfilled this feeling wears off, and the observer looks with entire confidence that within a minute he will see a notch begin to form on the limb of the sun. He is sure to see it if he is looking at the right place, and he knows the time at which it commences.

An hour or more must now in general elapse before the sun is entirely covered. During this hour the sun is as it were gradually eaten away by the advancing moon, and is at length reduced to a thin crescent. Up to this time no remarkable change is noticeable in the light ; it is indeed very curious how little the eye marks the loss even of three fourths of the ordinary light of the sun. What is first remarked is not so much the apparent approach of darkness as a singular change in the aspect of the light, which becomes of a lurid tint, as if the air were filled with smoke through which the sun was shining, or the sun itself changed to a distant fire. The reason of this appearance is that the light now comes almost entirely from near

the edge of the sun. It is well known that the atmosphere of the sun absorbs a large proportion of the blue light, and that this absorption is much greater near the edge of the sun than at its centre, owing to the greater thickness of atmosphere through which the rays of light have to pass in order to reach us. By simply looking through a well-smoked glass the observer can see that the edge of the sun looks darker than its centre, owing to this absorption. The central or blue part of the sun's apparent disc being entirely cut off by the moon, we can see only the reddish region near the limb. Thus the light of day as the eclipse progresses becomes more and more lurid until the sun has almost disappeared.

At length only a minute thread of light is left, and the observer knows that the grand phenomenon is right upon him. If he is upon a lofty eminence, so as to command a view of a wide extent of country, he will see the region west of him enveloped in darkness, while toward the east the sun is still shining. During our recent eclipse the shadow of the moon passed over Pike's Peak, from the summit of which the view extended some seventy miles in every direction. The sight of the mighty shadow approaching at the rate of a mile in two seconds is described by the spectators on the mountain as one of the grandest and most impressive sights which they ever beheld.

As the shadow comes upon the observer there is a rapid increase of the darkness, as if a pall were spread over the heavens. At the same moment the small thread of sunlight which remains visible is broken up into little points of light, which disappear in rapid succession. As the last of these vanishes, a singular transformation of the scene is noticed. Unless the observer is favored by an unusually clear sky, or knows what to expect, he will not remark any thing before totality except the slowly-vanishing crescent of the sun, or the coming of darkness. But at the moment that the last ray of sunlight disappears he sees the moon as an intensely black globe, surrounded by a soft effulgence or corona. With the aid of a telescope, and very often without it, tongues of rose-colored flame are seen shooting out from behind the moon. These are the eruptions of glowing hydrogen thrown up from

the surface of the sun to heights of thirty, fifty, or even one hundred thousand miles. They seem to be most numerous at times of great solar activity, which occur at intervals of about eleven years, and are marked by numerous sun-spots. The present time is one of comparative solar quiescence, so that during the nearest eclipse only a single striking flame was noticed. During the few minutes that the eclipse lasts no striking change occurs in the appearance of things. But, just before it is over, the air suddenly begins to grow brighter, owing to the illumination of the atmosphere outside the limit of the shadow, which is now close upon the observer. A moment more, and a dazzling ray of bright sunlight shoots out from one side of the moon, the corona disappears from view, and the total eclipse is over. If the observer is in a commanding position he will see the shadow flying away toward the east at the same rate that it came from the west.

The principal object of the present paper is to show how the problems which eclipses suggest have arisen, and in what shape the recent eclipse which passed over our Western Territories has left their present form. When presented in their simplest aspect these problems are not so complex as one would suppose from the elaborate discussions to which they have given rise. If the sun were nothing more than the shining globe which it appears to be when viewed with the naked eye, and if it were surrounded by no material objects whatever, then nothing could be learned about it from a total eclipse. In such a case there would be nothing to be seen around the edge of the moon during such an eclipse. But all the interest which centres in the physical observations of the phenomenon arises from the two appendages which we have already mentioned, the *corona* and the *prominences*. These two objects are quite distinct. We call to mind that the corona is a bright halo or glory surrounding the moon on all sides, and of somewhat irregular and varying form, but always presenting the same general aspect. The prominences, on the other hand, appear as tongues of rose-colored flame of the most fantastic forms, as "ships," "trees," "coals of fire," "tongues," etc., and never have the same aspect in any two eclipses.

The earlier descriptions of the corona are, as might have

been expected, entirely too vague to found any conclusion upon. It was not until the seventeenth century that any thing like an accurate description of it was given. Even when the existence of the corona was well established it was still uncertain whether it belonged to the sun or whether it was due to an atmosphere surrounding the moon. We find this question discussed by Arago in connection with the eclipse of 1842, and even in the latest work which he prepared, his "*Astronomie Populaire*," he does not give a decided answer to the question. Indeed, it was not until the light of the corona was examined by the spectroscope and shown to be in its nature entirely different from reflected sunlight that the solar origin of the corona was conclusively established.

None of the early observations of the corona are fit to give the slightest information respecting its constitution. This must not be considered as a reflection upon the observers, because, from the very nature of the case, it was impossible to make any observations which would decide any question that might arise respecting it. A wide brilliant aureola was plainly to be seen, but how was it possible to do more than give a description of its appearance? The first description of the corona having any pretension to accuracy was given by Plantade, of France, who observed the eclipse of 1706 at Montpellier. He says: "As soon as the sun was entirely eclipsed we saw the moon surrounded by a crown of white light about three minutes in breadth. Within this breadth the light was of uniform brightness, but outside it changed into a faint glow, formed around the moon a circular area about four degrees in radius, and faded away by insensible degrees in the surrounding darkness."

The description is remarkable for the extraordinary breadth assigned to the corona. As the latter has never since been seen to extend more than half a degree from the moon in every direction, we must regard the breadth of four degrees as a very exaggerated estimate.

One of the most striking features of the corona, as revealed in recent eclipses, is its extreme irregularity of form. This feature seems to have been scarcely ever remarked by the older observers, who nearly always described it as round. It is

curious that the first clear description of the pointed rays of the corona is given by the officers of a French ship, the Comte D'Artois, who on the 9th of February, 1766, observed a total eclipse in the Indian Ocean. They say that during the whole of the total eclipse they saw a luminous circle around the moon, forming four cones or pyramids of light standing opposite each other, of which the longest were in the direction south-west and north-east. From a drawing which they gave it would appear that these cones of light were about midway between the equator and the poles of the sun.<sup>1</sup>

Such rays have been observed in nearly every recent total eclipse. The corona never appears round, but cones and rays of light of a fantastic form shoot out in various directions. Sometimes, though rarely, these rays have been seen curved like a hook. No general rule regarding their position has ever been discovered. In the eclipse of 1869, as seen in this country, the corona appeared most prominent about midway between the equator and the poles of the sun, exactly as in the eclipse of 1766, just mentioned. The highest parts of the corona extended out so short a distance that the appearance was approximately that of a square, the sides making angles of forty-five degrees with the axis of the sun. The corona seemed least prominent near the sun's equator and poles, and highest in mid latitude; it was, therefore, supposed that as a rule the elevated portions of the corona did not exist near the sun's equator or near those poles. This view was, however, totally disproved by the recent eclipse, which was probably observed in a clearer atmosphere, and thus under more favorable conditions than any other eclipse known. The line of totality passed directly down the highest part of the Rocky Mountains, in the region where, as is well known, the atmosphere is of remarkable purity. The day also was exceptionally cloudless. On Pike's Peak, General Meyer and Professors Abbé and Langley saw the eclipse through a perfectly transparent sky at an altitude of fourteen thousand feet. Here, as well as elsewhere, two coronal rays were seen extending out to a distance of five or six degrees from the sun, or in linear meas-

<sup>1</sup> Le Gentil, "Voyage dans les Mers de l'Inde," vol. ii.

ure to a distance of eight or nine millions of miles, their direction being very nearly in that of the sun's equator. Nothing like such an extraordinary extension of the corona was ever before seen. Was this owing to the exceptional clearness of the atmosphere enabling the discoverers to see what previous observers might have seen but for their less favorable position, or was it really something exceptional which never existed before during a total eclipse? This is a question very difficult to answer. In view of the fact that the corona was less brilliant than in previous eclipses, and that the sun was at its lowest ebb of activity, it seems exceedingly improbable that the corona should have received any unusual extension. The writer therefore rather inclines to the view that these long rays belong regularly to the corona, and had previously remained unseen, simply because the observers had not a sufficiently transparent atmosphere.

Another view of the subject may be taken. So far as we can trace the zodiacal light it grows brighter and brighter as we approach the sun. The question may arise, Does this increase of brightness continue to the sun itself? If it does, we might suppose this light to be continuous with the corona. With a view of throwing light on this question, the writer during the recent eclipse of the sun observed the surrounding sky with the nearer parts of the corona cut off by a screen, and was enabled to see the two long wings of light extending out from each side lying nearly in the direction of the ecliptic. So far the analogy is complete, since the zodiacal light lies principally near the ecliptic, but on mature reflection he is disposed to consider it too slight to found any theory upon. The zodiacal light at its base widens out so much in a northerly and southerly direction, that it seems rather more probable that it is equally bright all around the sun than that it would be wholly in the direction of the ecliptic. True, we cannot say certainly that this is the case; it may be equally probable that the extension in the direction of the ecliptic is as well marked close around the sun as it is at a distance from it, but the uncertainty necessarily weakens the hypothesis of the connection. Again, there is nothing by which we can differentiate these long wings, now seen for the first time, from the shorter ones seen during other eclipses,

except their great length. We cannot, therefore, say but that, by observing another eclipse under equally favorable circumstances, we shall find similar wings going off in entirely different directions. Therefore, there is no proof that the direction of these wings near the ecliptic is any thing more than a result of chance. If, however, subsequent observations should show that they always have this direction, it would make the connection with the zodiacal light almost certain, but in view of the rarity of total eclipses occurring under such favorable circumstances, it is likely that the question will not be settled for many generations to come.

When we seek to inquire into the nature of the corona, one of the first questions which arises is whether it shines by its own light or by the reflected light of the sun. In the earlier days of observation there was no possible way of even approaching to a solution of this question, but when the polariscope was discovered it was found that this instrument would enable an observer to distinguish between light which came directly from a luminous body and that which was reflected from any object. The first attempt to examine the question in this way was made by Arago, who proposed that the polarization of the coronal light should be examined during the eclipse of 1842. The results were singularly discordant. Arago himself was so absorbed in the contemplation of the spectacle that he forgot to apply the polariscope until the eclipse was nearly over. Then, looking through it, he saw the tinted colors which indicated polarization, but had no time to decide upon their intensity, or to determine whether they arose from the general polarization of the light of the sky or from that of the corona itself. The observations of Mauvais, his assistant, appear more decisive. Looking at the corona through a Savart's polariscope, he saw the color tints which indicate polarization. They were very bright on the corona, the greatest intensity corresponding to a horizontal position. On the other hand, two other observers, Pinaud and Boisgiraud, brought out an entirely different result. They found no trace of polarization in the light of the corona; the polariscope when directed towards this aureola gave no sensible polarization. It is not surprising that Arago was perplexed by these discordant results,

and concluded that the polarization was not in the light of the corona itself, but in that of the atmosphere through which the observers had to look in order to see it.

Singular though it may appear, we find this same discordance respecting the polarization of the corona among the observations of nearly every eclipse which has since been observed.

On the whole, however, a large majority of the observers have noticed polarization, and this majority has very generally been agreed that the plane of polarization was radial; that is, that it passed through or near the centre of the sun. This is exactly what we should expect from the reflection of the rays of the sun by the coronal matter. To this direction of the polarization, however, there was during the recent eclipse one remarkable exception. Mr. Hastings, of the Johns Hopkins University, is understood to have reported that he found the plane of polarization tangential. The general disposition may be to reject a result so unexpected and so discordant in the most summary manner; but a noteworthy circumstance is that, so far as can be judged from the descriptions of the observations, the arrangements made by Mr. Hastings to settle the question beyond all doubt were more complete and effective than any other before tried. That the observation is peculiarly liable to error would be inferred from the different results obtained; and this inference will be fully confirmed if we reflect that the whole corona is included within the space of a degree in diameter, that the plane of polarization will therefore have every direction within this circumscribed place, and that the instrument usually used for determining it cannot readily be applied to any distinct point of the corona, but needs a considerable luminous surface. To avoid this difficulty it is understood that Mr. Hastings placed a diaphragm in the eyepiece of his telescope, pierced with a hole which would admit only a small portion of the light of the corona. The pointing of the telescope was made by an assistant, so that the observer himself did not know what part of the corona he was looking at, and therefore did not know in what direction the centre of the sun lay. As he made his observation the assistant pointed the telescope at several parts of the corona in succession. The directions of the

plane of polarization were measured by the Savart polariscope. After the eclipse was over the directions of polarization were compared with those at which the observer had pointed the telescope, and this led to the result that in each case that direction was at right angles to the direction of the sun's centre.

It can hardly be disputed that this method of proceeding in a question of such practical difficulty seems more free from sources of error than any other used. Can it, therefore, overthrow testimony of so large a body of previous observers in favor of radial polarization? This is a question which each one must judge for himself, but the large majority will probably hold that some mistake was made, either by Mr. Hastings or by his assistant, in estimating directions or interpreting his observations, which mistake resulted in the plane being placed at right angles to its true direction. Whatever view we take of this matter, the observations must be considered as among the most valuable made of the kind, because they prove beyond a doubt that the light of the corona is polarized, and therefore that it is in great part reflected light.

A yet more valuable method of investigating the corona is to be found in spectrum analysis. So far as known, the first attempt to apply this method to the case in question was made by one Fusinieri Vidence, of France. His observation is quoted by Arago in his "Notice sur les Eclipses," who says that he decomposed the light of the lunar aureole by the light of the prism, and found that the spectrum arising from this decomposition was absolutely devoid of green light, the place ordinarily occupied by this color being entirely dark. This result is directly the opposite of those obtained by subsequent observers, some of whom have found a large portion of the corona light to belong to the green part of the spectrum. The observation must be considered as probably erroneous; yet it is not devoid of interest as one of the earliest examples of the application of spectrum analysis to the corona, and as suggesting the possibility of great changes in the spectrum of that object.

It was nearly twenty years after this observation before spectrum analysis properly so called was pointed out by Kirchoff and Bunsen, and the possibility of applying it to the composi-

tion of the heavenly bodies was suggested. It was yet longer before a total eclipse occurred under circumstances allowing of a fair application of the method. When the great eclipse of 1868 passed over India, the astronomers and physicists of Europe had become fully alive to the importance of the method, and thus resulted the celebrated observation of Janssen, which showed that the solar prominences were composed of glowing hydrogen. But Janssen paid no attention to the spectrum of the corona, being so much absorbed in his remarkable discovery of the nature of the prominences, and in the result which followed it, that the spectrum of these objects could be seen without the sun being eclipsed at all. It was not until the eclipse of 1869, which passed over this country from Iowa to North Carolina, that the spectrum of the corona was fully and fairly observed. Then was it found to be a continuous one, at least so far as the principal colors were concerned, crossed by a single bright green line. This observation has been abundantly confirmed by subsequent observers, and it is also found that the continuous spectrum is crossed by the dark line of the ordinary solar spectrum. It is true that the majority of observers have failed to see these lines, but their negative evidence can hardly overthrow the positive evidence of Professor Barker and others, who report the ordinary dark lines as having been certainly visible.

This indicates that the light of the corona is composed of two parts: firstly, a portion of reflected sunlight, and, secondly, a part given off by a glowing vapor; the latter being the portion which forms the green line. This line is much more intense in some eclipses than in others. During the recent eclipse the greater part of the observers did not see it at all, although the continuous spectrum was as bright as usual. We conclude, therefore, that during the recent eclipse the glowing gas in question was present in much less quantity than is usual, and that the composition of the corona is not always the same. But what is this glowing gas which produces the green line? The only way to answer this question is to first learn what known terrestrial substance will give the same kind of light when evaporized, but unfortunately no such substance can be found by the most rigid research. The bright line being seen in a part

of the spectrum represented by the number 1474 on a scale laid down by Kirchoff, all we have hitherto been able to do is to call this unknown gas "1474 matter;" we cannot even guess at any other of its properties than that of emitting this peculiar light. At one time it was supposed by Angstrom of Sweden that the aurora gave the same bright line, but subsequent observers have shown that this was a mistake.

The general outcome of two centuries of observation upon total eclipses has been simply to give us enough to excite our curiosity, and furnish a basis for speculation. We can hardly say that we know any thing more about the corona than the first observer who ever saw it might have guessed by simply looking at it, unless it be that it undoubtedly belongs to the sun. We know that it must be material, because light comes from it; and if material, it must reflect the light of the sun, no matter whether we regard it as self-luminous or not. Therefore the continuous spectrum with the greater or less trace of dark lines and the polarization of its light is exactly what we should expect as the result of a greater or less amount of reflected sunlight. All that investigation has shown is that the amount of reflected sunlight is considerable as compared with what emanates directly from the object itself. Again, at the enormous temperature which must prevail around the sun all known substances would be vaporized, and would therefore give one or more bright lines. One or more bright lines is therefore exactly what we would expect from the spectrum of any object in the immediate neighborhood of the sun. The examination of the bright lines simply shows us that the substance of the corona, whatever it may be, is one which we have never succeeded in observing upon the earth; that is to say, it has simply shown us that we know nothing at all about it.

Unsatisfactory though this state of things may be, our whole knowledge of solar physics, perhaps I ought to say our ignorance of the subject, is almost equally unsatisfactory. We have indeed learned a great many facts respecting the activity of the sun's surface, some of which have been more or less generalized. We may cite, for example, the periodicity of the solar spots, which shows the activity of the sun to increase and diminish in a cycle of eleven years; the shape of the spots, and the man-

ner in which they appear and disappear ; the regions of the sun's disc on which they are formed ; their connections with the prominences or red flames which are generally above or around them ; the chemical composition of these prominences ; the absorbing atmosphere or chromosphere, composed largely of hydrogen and other metals known to exist upon the earth, which surrounds the whole surface of the sun and absorbs a considerable portion of its radiant light and heat. At first sight it may seem that this is a great deal to know, and in fact we are in no way disposed to undervalue it or to detract from the admiration which every one must feel at the single achievement of determining what terrestrial substances exist in the sun. The great drawback to our satisfaction arises from our total inability to make use of this knowledge for the purpose of answering the question, *What is the sun?* We have a great collection of isolated facts, but are wholly in the dark as to how they are to be grouped and explained. To give the why and wherefore of what we see, and to form a proper theory of solar action, it is necessary to show how the motions going on in and around the sun are the consequences of the properties of matter which we discover by experiment and observation at the surface of the earth. Not only are we without the first elements of any such explanation, but the conditions for it seem to be almost entirely wanting. There is a very general agreement as to what things look like—what we see when we investigate the sun or its surroundings with a telescope or a spectroscope ; but when we inquire what things actually are we find the utmost discordance of opinion, without any chance of reaching a demonstrative conclusion. All agree that the temperature of the sun is enormously high—so high that nearly all chemical combinations are dissolved by the fervent heat, but when an estimate of the temperature is reached we find the results to be discordant in the extreme. Some place it little higher than that of the reverberatory furnace or of the electric arc, while others reckon it to be millions or tens of millions of degrees.

Then consider the photosphere, that shining surface from which the light of the sun emanates, and which we commonly think of as the sun itself, though an astronomer understands by it simply the shining surface of the immense globe which

forms the sun. What is it? The earliest observers who studied the appearance saw it to be a shining sphere, and to this day no one has been able to say with certainty much more than that it is a hot shining sphere. No doubt a modern might be able to say a little more than this to an ancient, but would his information be in the direction of telling him what the photosphere is? Let us see: The first and simplest thing we should expect to know about it is whether it is solid, liquid, or gaseous; but this very first question is one which no one has been able to answer with certainty, and respecting which the greatest diversity of opinion prevails. Some hold it to be solid, admitting of course that it must be frequently melted or broken up in places by the intense heat rising from the interior, but maintaining a general solid texture. Others consider it as a mixture of gaseous and solid matter or of solid and liquid matter, while still others regard it as purely gaseous. And none of these conflicting views can be either supported or overthrown by unanswerable arguments.

If so little is known of that part of the sun which all mankind have seen whenever they looked at it, what shall we say of the more obscure features which have only been discovered in recent times?

We have alluded to the extraordinary activity which prevails at the surface of the sun, and which is shown by its belching forth immense volumes of hydrogen gas and vaporized metals to heights of fifty or one hundred thousand miles, or by its projecting them along its surface with velocities of one hundred or two hundred miles a second.

If this takes place at the surface, what, we would ask, must be the agitation in the interior? Yet immediately beneath all this inconceivable activity we have a photosphere seemingly so calm that the most refined observation has hardly been able to show any deviation from a perfectly spherical outline. True, it is from time to time subject to change, especially by a formation and closing up of spots; but these changes are nothing compared with the agitation of the chromosphere which immediately surrounds it. It seems to the writer that in this contrast between the serenity of the photosphere and the agitation of the chromosphere or layer of gaseous metals which immediately

surround it we must have a key to a theory of solar activity. Yet he is hardly aware of a serious attempt to make use of the key for this purpose.

Let us return again to the corona. We know that gravitation at the surface of the sun is about twenty-seven times as intense as at the surface of the earth. All the matter which surrounds the sun should therefore fall to its surface, as at the surface of the earth, unless sustained by some opposing forces ; but what prevents this corona matter from so falling ? That it cannot be an atmosphere sustained by its own elasticity, and resting on the surface of the sun, seems to be abundantly proved. We may suppose it held up by electric repulsion, but this is purely a guess, without the slightest foundation in observation. All we can say with certainty on this subject is that we know nothing about it.

Perhaps the difficulty we meet with may be made more clear by considering one of the features of the solar spots. The earlier observers found these spots to comprise a dark central portion which they called the umbra, surrounded by a shaded border, sometimes nearly as bright as the sun itself, which they called the penumbra. When this border was studied with the best telescopes and in good atmospheric conditions, it was found to exhibit a very singular structure. Instead of being of nearly uniform tint, or slightly mottled like the surface of the sun, in general it was found to have a fibrous appearance, like the threaded fringe of a shawl or of the end of a straw-thatched roof. The threads were at right angles to the edge of the spot ; that is, they projected from the bright photosphere surrounding the spot towards the centre of the latter. Here we have a very interesting phenomenon of the spots, and one which has often been depicted. But what are these fibres ? And what is their relation either to the photosphere or to the spot ? To this question, and to all others connected with the subject, we have to answer with our silence. It seems to be pretty well established that the solar spots are openings in the photosphere. This being the case, we might imagine the thatch-work to form the framework of the photosphere itself, and when the photospheric or brilliant matter is removed in order to form the spot, a portion of this framework to remain around the edges

of the opening—much the same as when a hole is dug in a mixture of soft earth and straw, the ends of the straw will project from all sides into the hole. But it would be wholly unwarranted to assume any such connection between the photosphere and the thatch-work. We have not the slightest evidence that the latter extends into the photosphere to form its framework. Therefore, as in all the other cases we have considered, all we can say is that we know nothing about it.

That man will not be satisfied to rest in this state of ignorance, we may be assured. The sun as the supporter of all life and movement on the surface of our globe must be regarded as the most important object of investigation with which science has ever concerned itself. No disappointment will, therefore, damp the ardor of those who are engaged in researches upon it. We may reasonably hope that the near future shall be more glorious than the past, and that if a satisfactory theory of the sun's constitution is not formed we shall still be able to reach some conclusion respecting the sources, the duration, and the possible changes of its supply of heat.

SIMON NEWCOME.

## THE RECENT SOLAR ECLIPSE.

**N**O natural phenomenon is more impressive than a total eclipse of the sun, and very few possess a higher scientific interest.

The aspect of the earth in the strange light of the solar crescent, the onrushing shadow, the sudden swoop of the darkness, the lighting up of the stars, the serene radiance of the corona shining calmly around the dark globe which has supplanted in the sky the orb of day, and the victorious outburst of the sunlight at the end—these all combine to produce a series of sensations and emotions to be obtained in no other way, and never to be forgotten.

The rarity of the phenomenon adds to its interest, since very few can ever have the opportunity of seeing it more than once, or even at all, except by making special journeys for the purpose. At London, for instance, there was no total eclipse of the sun in all the interval between 1140 A.D. and 1715, according to Halley; and Hind has shown that even the eclipse of 1715 was not quite total there, that there has not been one there since, and that there will not be one during the whole of the coming century, though in 1999 the moon's shadow will pass very near the city.

London has been, perhaps, rather unusually unfortunate in this respect, but it is far within bounds to say that at any given place total eclipses of the sun do not occur as often, on the average, as once in a century. Of course the explanation of this extreme rarity of total eclipses at any particular place is not that they happen so seldom, but that, when they do occur, they are visible as total only over a limited area. The shadow

of the moon, as it traverses the earth, can never be more than 160 miles in width, and is usually much narrower.

If, however, we consider the whole surface of the earth, total solar eclipses are not at all uncommon, happening, on the average, as often as once in two years. The Chaldeans long ago discovered that eclipses recur approximately in a regular cycle of a little more than 18 years, and gave to this cycle the name of Saros. In this period there are usually about 70 eclipses—29 of the moon and 41 of the sun; and of the solar eclipses about one fourth are total, the rest being annular or simply partial.

The astronomical interest of eclipses is twofold. They furnish, on the one hand, exceedingly accurate determinations of the moon's place with reference to the sun, from which are derived data of the highest importance in the lunar theory. In the other, they present an opportunity, short but precious, for studying the solar atmosphere, and the strange envelope of luminous matter at other times hopelessly concealed by dazzling sunlight. Then, also, we can search the sky in the neighborhood of the sun for new and unknown, though not unsuspected, planets circulating in orbits of smaller diameter than that of Mercury.

All eclipses, therefore, are carefully observed, and from their observation results have been deduced of the highest scientific importance.

It will be proper here, as an introduction to our account of the late eclipse, to present some brief notice of the more remarkable eclipses which have occurred in recent years, in order that we may have a clearer view of the nature of the problems involved and the progress made toward their solution.

In 1842, on July 8th, just two Saros periods before the eclipse of last July, the moon's shadow traversed Southern France, Northern Italy, and part of Austria. The eclipse was observed with great care by a multitude of astronomers, conspicuous among whom was Arago. On this occasion the polariscope was first applied, and showed the polarization of the light of the corona. The principal result of the eclipse was, however, to concentrate scientific interest upon certain

rose-colored projections seen upon the edge of the moon during totality. Similar things had been seen before as far back as 1733, but had attracted very little attention. In 1842, however, they were so conspicuous and striking in form and appearance that none could fail to notice them, or to feel an interest in their explanation.

In 1851 another eclipse crossed over Norway, and was observed by the English astronomers in force. The protuberances were still the principal objects of interest ; but the observations left the problem of their nature and origin still unsolved. There remained the widest divergence of opinion among those qualified to judge ; some taking them for clouds in the lunar atmosphere, some for solar clouds, while some even thought them mere optical illusions.

In 1860, the Saros brought around the return of the eclipse of 1842 ; the shadow traversing nearly the same portions of the earth as before, but passing further south, through the British possessions and Labrador upon our own continent, and through the northern part of Spain and Algeria. Extensive expeditions went out to observe it. In this country the Coast Survey sent a large party to Labrador under the charge of Professor Alexander, and the famous "Himalaya Expedition" (so called from the name of the vessel which conveyed the party) was sent to Spain from England, under the charge of the Astronomer-Royal. Photography was employed for the first time on such an occasion, and in the hands of Secchi and De La Rue demonstrated the solar character of the prominences, by showing that during the totality the moon moved over them, covering by degrees those upon the eastern limb, while those upon the western were gradually unveiled. This was a most important fact, ascertained and placed beyond dispute ; but their real nature still remained as mysterious as ever.

In 1868, the moon's shadow passed over Central India, and the English and French observers applied the spectroscope for the first time with most brilliant results. A single glance showed the strange objects which had caused so much speculation to be great clouds or flames of glowing gases, among which hydrogen is especially conspicuous ; clouds which reach an elevation, as we know from later researches, sometimes as

high as 200,000 miles, changing their forms and positions with an activity of which terrestrial phenomena furnish us no examples or analogies. It was only a few days after this eclipse that the genius of Lockyer and Janssen showed us how we might, by the aid of the spectroscope, keep up our observations of these magnificent objects from day to day, regardless of the sunlight, and without the necessity of waiting for the help of the moon.

Polaroscopic observations at this eclipse, as well as the preceding one of 1860, on the whole concurred in showing that the light of the corona is strongly polarized in flames passing through the sun. We say on the whole, because there were numerous negative and some anomalous results of a very puzzling character; for some we can find a reasonable explanation, but others quite defy all attempts to reconcile them with the general mass of observations.

The eclipse of 1869 was the first which had been visible in the United States since 1834, and was observed with great interest and enthusiasm. The shadow came down from Alaska, through the British possessions, and passed across the whole country, traversing Dakota Territory and the States of Iowa, Illinois, Indiana, Kentucky, Tennessee, and North Carolina. As last July, so also on this occasion, the weather was favorable at nearly all the stations of observation, and an immense amount of valuable information was collected.

Photography was extensively employed, and the three different parties of the Philadelphia expedition obtained an interesting series of pictures, both of the progress of the eclipse and of the prominences visible during the totality. An interesting and important, though not especially gratifying, result was to show that pictures taken before or after totality are of very little value in determining the relative places of the sun and moon. It had been hoped that a series of such pictures would constitute a most exact as well as unimpeachable record of the moon's place and movement.

The corona was for the first time satisfactorily photographed on this occasion by Professor Winlock's party in Kentucky. Mr. Whipple, the photographer of the party, obtained a picture which has hardly been surpassed even by more recent observers.

The polariscope was again used ; and again, while the general drift of the observations was to show that the coronal light is polarized in radial planes (as should be the case if caused by the reflection of sunlight from minute particles), some of the best observers obtained contradictory or at least puzzling results.

The spectroscope was also extensively used ; and since the problem of the prominences had been so completely solved during the preceding year, it was mainly directed upon the corona, concerning which a warm debate had sprung up. Some observers held that it was a solar atmosphere, while others, and perhaps a majority, were disposed to regard it as somehow or other caused by our own atmosphere, or perhaps due to some not wholly understood effect of the edge of the moon upon the solar rays.

The answer of the spectroscope was prompt and decisive. A bright green line (since then generally known as 1474, because it falls at that number on Kirchoff's scale) was found in the spectrum of the corona, proving that it is composed, in part at least, of glowing gas, and therefore must be solar.

The result, however, was received with a good deal of suspicion and reserve by some who believed in its terrestrial origin, and the eclipse of December, 1870, was looked forward to to settle the question.

In this eclipse (commonly referred to as the Mediterranean eclipse) the path of the shadow crossed Southern Spain, Northern Africa, Sicily, and Turkey. Extensive preparations were made for its observation, and several parties were sent out even from this country by the Coast Survey and Naval Observatory. Unfavorable weather interfered with many of the observers. None of the photographers were fully successful, and the polarization people were sadly interfered with.

The spectroscopists were more fortunate on the whole. The observations of 1869 were fully confirmed, and the spectrum of the so-called "reversing layer" of the sun's atmosphere was caught for the first time. The dark lines of the solar spectrum had been believed, ever since the time of Kirchoff, to be produced by the absorption of incandescent gases close to the surface of the sun. This being so, theory indicates that just at

the moment when the moon exactly covers the sun, and the sun's atmosphere is left projecting, so to speak, beyond the edge of the moon, we ought to see the solar spectrum reversed—its dark lines transformed into bright ones. One or two previous attempts to catch the phenomenon at former eclipses had failed through slight imperfections of adjustment ; but in 1870 it was seen to perfection—the most beautiful and most evanescent of all the wonderful spectacles visible at such a time.

In December of the next year (1871) another eclipse occurred in India, its track passing very near that of the eclipse of 1868.

The spectroscopic observations of Lockyer, Maclear, Respighi, Janssen, and others, entirely confirmed those of previous years, and added something. Janssen for the first time caught a glimpse of some of the dark lines in the corona spectrum, showing that a portion at least of its light is reflected sunlight, and confirming the conclusion drawn from polariscopic observations. For the investigation of the corona, a new instrument was also introduced—the so-called "*slitless spectroscope*." It consists merely of a telescope with a prism or train of prisms before its object-glass. If, with such an instrument, we look at the sun or moon, or a distant lamp, we get merely an elongated image, red at one extremity and violet at the other, but without markings of any kind ; but if we look at a mass of incandescent gas, a Geissler tube for instance, illuminated by an electric spark, we get a series of distinct colored images of the object, instead of the continuous band before mentioned. If the source of light contains both solid and gaseous incandescent matter, we get a combination of the two effects ; colored images more or less definite upon a luminous background.

With instruments of this kind, both Lockyer and Respighi found a number of images of the gaseous portion of the corona—the former four, the latter three. These images were simple, round, smooth rings, without any of the rays or structural forms seen by a telescopic examination of the corona. This, of course, tends to show that the rays and filaments are of different nature and origin from the inner corona, the more brilliant radiance close to the sun's surface ; and this conclusion is fully confirmed by the latest results.

In 1874 the track of a total eclipse passed across south Africa. The observers naturally were not very numerous ; but Mr. Stone, Astronomer-Royal at the Observatory of the Cape of Good Hope, made the most of his means and opportunities, and obtained a collection of observations which, although not revealing any thing especially new, are yet important as confirming some of the results previously obtained but not universally accepted. His drawings of the corona are peculiarly interesting as showing a form intermediate between that seen in 1869 and that seen last summer.

One more eclipse only remains to be noticed before that of last July—the Siamese eclipse of 1875. Elaborate preparations were made for a photographic attack upon the spectrum of the chromosphere and corona upon this occasion by a party which was sent out from England under the charge of Mr. Schuster. Bad weather at some of the stations, and a number of untoward circumstances, prevented any thing more than a partial success.

The new instruments upon which special dependence was placed were the photographic spectroscope and the prismatic camera. The former instrument was merely a spectroscope of the ordinary construction, except that a train of quartz prisms was employed, and a small photographic camera replaced the view-telescope, a photographic plate being substituted for an observer's eye ; there was also an arrangement for exposing the slit in parts, so that a reference spectrum could be obtained for purposes of measurement, by admitting sunlight through one end of the slit after totality was over. The instrument was attached in the usual way to a large telescope which formed an image of the corona upon the slit-plate. Two of these instruments were employed, but for some reason gave no result at all.

The prismatic camera consisted simply of a good-sized telescope (about 4 inches in diameter and 5 feet long), with a prism in front of the object-glass and a photographic plate in the place of the eyepiece ; in short, a photographic slitless spectroscope. With this instrument a very curious and interesting result was reached. The picture shows a continuous band, with the image of some of the protuberances three times repeated ; corresponding, of course, to three bright lines in

their spectrum. What two of these lines are there can be but little doubt, from their position and distance upon the plate ; they are F and a line near G, both due to hydrogen, and the latter often designated as  $H\gamma$ . The third line, however, instead of coinciding with the  $H\delta$  line (generally known as  $h$ ), appears to be decidedly more refrangible, its place being at the extreme end of the visible spectrum, very near to, if not coinciding with, H, one of the great calcium lines. The question of exact coincidence could not, however, be settled by the photograph.

In all other respects the results of the eclipse were simply a repetition and confirmation of those previously obtained.

One point more should be noticed before passing on to a discussion of the recent eclipse—this, namely, that at nearly all of the eclipses mentioned since that of 1860 there was made a more or less thorough search for an intra-Mercurial planet, though entirely without success. In 1869, the exploration by Professor Newcomb and Dr. Gould was conducted with especial care, and with instruments of unusual power.

The eclipse of July 29th was the fourth return (according to Saros periods) of the famous eclipse of 1806, of which the eclipses of 1842 and 1860 were the second and third. On the present occasion the moon's shadow first touched the earth at sunrise in Siberia, not very far from Lake Baikal ; from there it moved north-east to Behring's Straits, where it crossed to the American continent, and changing its course to the south-east, travelled down through Alaska (passing over Mount St. Elias at noon) and the British Possessions. It entered the United States about quarter past two (local time), at the north-east corner of Washington Territory, and still preserving its general south-eastern course, though bearing off more and more to the east as it proceeded, it swept on with a velocity of nearly 2000 miles per hour, or between thirty and forty miles per minute, which is somewhat greater than that of an ordinary cannon-ball. Its course over the Territories of Idaho and Wyoming, taking the Yellowstone National Park on the way, carried it across the Union Pacific Railroad at Rawlins and Creston. From thence it rushed on through the magnificent mountains of Colorado and over the plains of the Indian

Territory and Texas, passing into the Gulf of Mexico at the south-western corner of Louisiana. Thence it crossed to Cuba, and went onward a little distance into the Atlantic, where it finally left the earth at sunset. The width of the shadow-track varied somewhat at different portions of its course, but on the average was about 116 miles, and the duration of the totality ranged from two minutes to nearly three minutes and a half, according to the width and velocity of the shadow at the observer's station. No reports of observations have yet reached us from Siberia, Alaska, or the British Possessions, and it is hardly probable that any were made of any scientific importance. Between the northern boundary of the United States and the Union Pacific Railroad observers were also very few, though some reports have come in from Signal Service weather observers; and the surveying party of Professor Hayden, who were very near the Yellowstone Park at the time, secured full observations. But from the Union Pacific Railroad to the southern boundary of Colorado the whole track of the eclipse was almost, without exaggeration, one continuous observatory, and in Texas also there were several well-equipped parties.

Beginning at the north, along the line of the railway, there were three important parties. Dr. Henry Draper, of New York, accompanied by his wife, with President Morton, of Hoboken, Professor Barker, of Philadelphia, and Mr. Edison, the inventor, were together at Rawlins.

At Creston, Professor Harkness, of the Washington Naval Observatory, headed a large party, containing among others Lieutenant Sturdy and Mr. Alvan Clark, the optician.

At Separation were Professor Newcomb, of Washington; Professor Watson, of Ann Arbor, with his wife; and Mr. Norman Lockyer, the distinguished English astronomer. He was a guest of Dr. Draper, but on the day of the eclipse preferred to be a few miles away.

In Colorado, the summit of Long's Peak was occupied by a party whose report we have not seen.

At Central City, Professor Holden, of the Naval Observatory, was stationed with a thoroughly equipped party, among whom were Professor Bass, of West Point, Dr. Hastings, of Baltimore, and Lieutenant Very, U.S.N.

At the same place also was another smaller party under the charge of Professor Compton, of New York.

At Idaho Springs, Professor Eaton and Mr. White, of Brooklyn, had a small party.

Professor Ferrel, of Washington, observed from the summit of Gray's Peak, which, like Long's and Pike's peaks, exceeds 14,000 feet in elevation above the sea-level.

In and immediately around the city of Denver no less than seven parties of various size and equipment made their observations.

Mr. Penrose, an English architect, artist, and astronomer of distinction, made his observations a few miles north-west of the city. Mr. Edmund Loder, another English astronomical amateur, with a small party, was stationed within the city limits.

So also was the venerable Father Sestini, of Maryland ; Miss Mitchell, Professor of Astronomy at Vassar, with a party of enthusiastic young ladies, who proved themselves quick-eyed and delicate observers ; Professor Colbert, of Chicago, with a considerable party, under the auspices of the Chicago Astronomical Society ; and Mr. Burnham, of the same city, who was sent out by the *Chicago Times*. Mr. Lewis Swift, of Rochester, N. Y., was with this party.

The writer, with a large party from Princeton, including Professors Brackett and Rockwood, and Mr. W. Libbey, Jr., was about two and one half miles south-east of the city. We had in our party also, as an honored guest, Mr. A. C. Ranyard, the Secretary of the Royal Astronomical Society of England.

At Schuyler, about twelve miles east of the city, Professor Stone, of Cincinnati, was located with a small party.

On the summit of Pike's Peak, the Signal Service station was occupied by Professor Langley and his brother and General Myer. Professor Abbe was to have been with them, but was so affected by the elevation that it was found necessary to remove him to a denser atmosphere, and his observations were made from a small hotel about half-way down the mountain-side.

On the line of the Atchison and Santa Fé Railroad were located two of the most important parties. At La Junta, Professor Hall, of the Naval Observatory, the discoverer of the

satellites of Mars, was in charge of a large party, including Mr. Rogers, of Washington, and Professor Wright, of Yale College. Professor Thorpe, of Yorkshire College, England, was with them as a guest.

At Las Animas, Professor Eastman, also of the Naval Observatory, was stationed with his colleague, Mr. Paul, and Professors Pritchett, of Missouri, and Boss, of Albany. Dr. Arthur Schuster, of Cambridge, England, the chief of the Siam eclipse expedition, was Professor Eastman's guest.

At Fort Worth, Texas, Mr. L. Waldi, of the Cambridge Observatory, headed a considerable party; and at Dallas, Mr. D. P. Todd, of Washington, was stationed with another.

Nor is the list we have given by any means complete, for while it mentions all the larger parties, it does not include a host of independent observers, who, singly or by twos and threes, were scattered all along the line, many of them competent, skilful, and well equipped for their special work. It would probably be quite within the mark to set down the total number of scientific observers as at least two hundred.

For the fortnight preceding the eclipse nearly all the parties had a very discouraging time. The weather was utterly unpropitious and unpromising; nearly every day it would happen that, however fine the morning might be, soon after noon the clouds would roll down from the mountains, bringing storm and rain.

At Denver, there was not a single day during the week preceding the event when the eclipse could have been satisfactorily observed; and the case was substantially the same at all the stations in Wyoming and Colorado. In Texas it was not so bad.

But on the day of the eclipse the weather was simply exquisite; hardly a cloud appeared through the whole mountain region. In Texas alone, there was a haze and cloudiness at some of the stations sufficient to interfere with the work.

The observations which were made may be divided into several classes:

I. Observations of precision, intended to determine accu-

rately the relative positions of the sun and moon, for the purpose of improving the lunar tables.

II. General observations, either with the naked eye or telescope, upon the form, extent, and structure of the corona and prominences.

III. Photographic operations for the purpose of procuring pictures of the corona.

IV. Spectroscopic observations, partly carried on by the aid of photography.

V. Polariscopic observations.

VI. Miscellaneous physical observations; photometric, thermoscopic observations upon the color of the sky, upon the "eclipse fringes," magnetic effects, etc.

VII. The search for the intra-Mercurial planet.

It will not, of course, be possible to give here any thing like a complete account of these observations and their results; partly because our limits forbid, but still more because very few official reports of work have yet appeared. We can only attempt a sort of general *r  sum  *, endeavoring to collect from the newspaper accounts, and other sources of information, a statement substantially correct.

I. The observations of precision, such as the accurate observation of the times of contact, together with the precise determinations of the relative positions of sun and moon at moments during the progress of the eclipse, were mainly cared for by the parties sent out from the Naval Observatory. Professor Newcomb, of the Nautical Almanac Office, who was stationed at Separation, and his assistant, Mr. Todd, at Dallas, also made observations for the same purpose; and Mr. S. W. Burnham at Denver made a series of some seventy careful determinations of the "position angle of the cusps." The observations are not yet reduced, and it is not now possible, therefore, to state precisely the result. The moon's shadow passed a few miles to the south and west of its predicted path, and was not exactly on time. The error, however, was quite small.

II. General observations.

As to the brightness of the corona at this eclipse as compared with previous ones there is considerable divergence of

opinion, though on the whole the prevailing impression is that it was much less brilliant than usual. Mr. Lockyer's impression was that at the Indian eclipse of 1871 it was at least ten times brighter<sup>1</sup> than now.

Many of the observers had seen both the eclipses of 1869 and 1870, and a large majority thought that this time the corona was much fainter than on either of those occasions, though a few, and some of the best observers, were quite of the contrary opinion. It is by no means easy to judge with much confidence when the only means is the comparison of a memory with a present sensation ; at the same time, if a person's observations have been made under nearly the same circumstances on all the occasions compared, the result is not without weight.

This was the case with those of the writer, who was engaged in the same sort of work during all three of the eclipses, and looked at the corona in the same way, for a few seconds, about the middle of totality. In his estimate, the difference was very decided, especially as regards the inner corona, so called—the bright and comparatively symmetrical portion nearest to the moon's limb. In 1869 this was nearly dazzling in its brightness, and certainly it was not so last July.

The extent, however, was not materially, if at all, diminished. Professor Langley, upon Pike's Peak, traced it to a distance of six degrees along the ecliptic, and Professor Newcomb corroborates the estimate. The longest rays extended nearly in the plane of the sun's equator, but they were comparatively ill defined ; while others which grew out of the polar region, though less extensive and perhaps less brilliant, were so much better outlined that they caught the eye of many of the observers much more forcibly than the equatorial ones. This led to some curious discrepancies : of two observers standing side by side, one would remark upon the polar extension of the corona as a very unusual circumstance, while his neighbor would totally disagree with him.

<sup>1</sup> By a curious mistake, Mr. Lockyer's statement was telegraphed exactly wrong—asserting precisely the reverse—and the erroneous telegram was made the text of an elaborate article in one of the leading English reviews.

The drawings exhibit similar and almost irreconcilable discrepancies, showing how strongly the personal element enters into all such observations of faint and indefinitely outlined objects. Notwithstanding this, they exhibit a substantial agreement in regard to certain details, sufficient in itself to prove, even if there were no other evidence, that these enormous streamers are objective realities.

Besides the drawings of the general appearance of the corona, a number of observers devoted themselves to a careful study and delineation of its minuter structure. Their results have not yet been published, but will undoubtedly throw much light on the subject.

The chromosphere and prominences were much less conspicuous than on former occasions. Three or four prominences of small dimensions showed themselves on the western limb of the sun and were certainly beautiful objects, but not to be compared with the immense masses which attracted so much attention in 1869.

On the whole, one might say that while that portion of the corona in the sun's immediate neighborhood was less conspicuous and brilliant than usual, the outlying portions—the long rays and streamers—were observed more satisfactorily than ever before ; and the observations seem to be best represented by the hypothesis that these streamers are collections of matter near the sun, but not actually belonging to it.

### III. Photographic work.

Many of the parties were provided with means of photographing the eclipsed sun, and several interesting and valuable series of pictures were obtained.

Of the Washington parties, those of Professor Hall and Professor Harkness were equipped with cameras. Mr. Rogers, of the former party, exposed five dry plates with great success ; the pictures being on the whole the finest we have ever seen, full of detail and every way perfect. Professor Harkness partly obtained a similar series, but whether as perfect as those of Mr. Rogers we have not heard—the method was the same ; a six-inch Dallmeyer lens, of about four feet focus, forming the image upon the plate. At Fort Worth, Texas, Mr. Waldo's party obtained three pictures which are said to be excellent.

Dr. Draper, at Rawlins, using the wet process, also secured some fine pictures ; and so did the Princeton party, using the same method, one of theirs of twenty-five seconds' exposure being fairly comparable to the best of Mr. Rogers's.

But for one or two untoward circumstances, Mr. Ranyard at Denver would undoubtedly have beaten every one in this line. He brought with him a magnificent camera of thirteen inches aperture, and about six feet focal length. This was mounted equatorially after the old English fashion, and provided with a powerful clockwork, which, however, did not perform satisfactorily. What was worse, by an unfortunate accident the instrument became displaced during totality, unnoticed by the gentleman who was making the exposures, Mr. Ranyard himself being busy elsewhere with polarization work. In consequence, he obtained only one or two pictures of short exposure, not at all superior to those of others. It is certainly a very great pity that we could not have had a long exposure picture from this unequalled lens, for it would undoubtedly have preserved for us, to be studied at leisure, all the faint and evanescent outlines of the coronal streamers.

Perhaps the most remarkable feature in the photographs of this eclipse is the existence of several groups of coronal filaments, apparently issuing from the sun's limb tangentially. Something like the same thing appears in the pictures of the eclipse of 1871, but not so strikingly.

Besides these operations for the purpose of securing pictures of the eclipse, photography was also employed as an accessory in the spectroscopic and polariscopic observations, as will appear when we come to speak of them.

#### IV. Spectroscopic observations.

These were made by a great number of observers and by a variety of methods, and may be classed as follows :

(1) Observations with "integrating" spectroscopes—*i.e.*, spectroscopes unattached to a telescope, and giving the consolidated spectrum of the whole mass of light without distinction of parts.

(2) Observations with the telespectroscope or "analyzing" spectroscope. In this instrument, the spectroscope is attached to a large telescope, the object-glass of which forms a distinct

image of the observed object upon the slit of the spectroscope. Accordingly, the observer sees, not the spectrum of the whole corona, but only of that particular portion which happens to be imaged on the slit.

(3) Observations with slitless spectrosco pes.

(4) Observations with the prismatic camera.

Observations with integrating spectrosco pes were made at various places ; among others, by Professors Morton at Rawlins, and Messrs. Smith and Bennett, of the Princeton party, at Denver. The spectrum shown was continuous, very faint, but perhaps not more so than on previous occasions. At the beginning and close of totality, a number of bright lines were seen, notably those of hydrogen and the green "1474" corona line. At the middle of totality no bright lines of any kind were visible in these instruments, but Professors Morton and Barker both report the presence of several of the most prominent Fraunhofer (dark) lines. In 1869, with a similar instrument, Professor Pickering saw the "1474" very bright at the middle of the eclipse ; and similar observations have been made repeatedly since then, so that there can be no question that there was a marked difference between the spectrum seen at this eclipse and on previous years. The non-appearance of "1474" was so unexpected that some of the observers at first thought their instruments must be out of adjustment.

The analyzing spectrosco pes were still more extensively used. Among the observers may be mentioned Professor Harkness at Creston, Professor Barker at Rawlins, Mr. Thomas and the writer at Denver, Professor Eastman at Los Animas, Dr. Schuster at La Junta, and Messrs. Rees, Seagrove, and Pulsifer, of Mr. Waldo's party, at Fort Worth. The reversal of the Fraunhofer lines was seen by nearly all of them at the beginning and end of totality ; but no new lines were discovered, unless we count as such the two H's, which had never before been observed at an eclipse, though discovered some years ago to be reversed in the chromosphere spectrum as seen from an elevated station. Professor Harkness and the writer made a careful search in the ultra-violet region for lines in the invisible portion of the spectrum, using for the purpose the fluorescent eyepieces of Soret. Dr. Schuster was

intending to do the same thing, but an unfortunate accident deprived him of his instrument only a day or two before the eclipse. Our search was vain, however.

The 1474 line could be seen all the time, though much less brilliant than usual. Professor Eastman especially busied himself with it, and found that it was visible in his instrument to a distance of from 8' to 10' from the sun during the whole totality ; nor did he lose sight of it, on sweeping out from the sun, at all before the rest of the spectrum—the whole went together. We take pains to be specially explicit as to this, because contradictory statements were somewhat freely made at first, before Professor Eastman's observations (which our own fully confirmed) were generally known. The hydrogen lines were also visible through most of the totality ; but it would seem that they may have become invisible for a few seconds about the middle of the eclipse. Just before totality it was noticed by nearly all the observers that the violet region of the spectrum was much more conspicuous relatively to the rest than ordinarily, so that with the unassisted eye one could see considerably beyond the H lines into the ultra violet.

The slitless spectroscope in one form or another was also extensively employed. Dr. Draper, looking at the eclipse during totality with such an instrument, failed entirely to see any rings like those observed by Lockyer and Respighi in 1871. Mr. Lockyer, who used a diffraction grating, tells the same story, and so do Professors Brackett and Rockwood, of the Princeton party. Professor Rockwood had an instrument devised expressly for the purpose, consisting of a binocular telescope with a pair of large prisms before the object-glasses : with this the bright lines of the chromosphere were beautifully shown at the beginning and end of totality—the H lines among others, and a red line very near B, which is rarely seen ; but nothing like a coronal ring could be made out with certainty. A trace of a green ring was suspected at one time, but it was not distinct enough to admit of satisfactory observation.

The photographic camera was used by Draper and Lockyer, by the Princeton party, and by Dr. Thorpe. Dr. Draper was the most successful. He employed a photographic portrait lens, six inches in diameter, placing at the point where

the convergent pencil of rays was about two inches across one of Mr. Rutherford's splendid diffraction gratings upon speculum metal. This was turned at an angle, so as to throw the reflected rays out to one side, where the images were received upon a photographic plate. With this apparatus a photograph of the coronal spectrum was obtained about half an inch in width and two or three inches long ; it shows here and there rudimentary images of the chromosphere, but not a trace of any coronal ring. The apparatus of Lockyer and Thorpe gave similar but much less perfect results. The apparatus of the Princeton party showed no impression whatever. It was designed especially with reference to an accurate determination of the position of ultra-violet rings, if any should be found, and the dispersive power was so great that the faint continuous spectrum was too much weakened to admit of being photographed ; if there had been any rings their light would not have suffered any such enfeeblement, and they would doubtless have appeared upon the plates.

Of all the spectroscopic observations the result is simply this : that at the eclipse of last July the gaseous substances, which on previous occasions soared high above the surface of the sun ; the hydrogen, and especially the unknown substance whose spectrum is characterized by the 1474 line—these were either entirely wanting in the corona, or else present in such small quantity and at such low temperatures that their peculiar lines, instead of being conspicuous, as hitherto, were either invisible or very faint. It may be a question whether the continuous spectrum was or was not more brilliant than usual. Mr. Lockyer thinks it was, and explains it by the hypothesis that the absence of incandescent gases thrown up from the solar nucleus renders cooler than ordinary the regions surrounding the sun, and thus permits an unusual quantity of the meteoric matter, which is supposed to be always abundant in that neighborhood, to remain unvolatilized and so capable of reflecting the sunlight.

It is hardly necessary to say that this peculiar condition of the corona is specially interesting in its relation to the sun-spot period. Every one now is more or less familiar with the remarkable fact, first announced by Schwabe in 1851, that the

sun-spots have a pretty regular period of about ten and one half years. Some years, as for instance in 1872, they are numerous; while at other times, and especially the present year, they are exceedingly few. In 1872 the solar surface was in a condition of extreme disturbance; at present it is in a state of almost unexampled quiescence. It was of course natural to suppose that the unknown causes, whatever they may be, which so profoundly modify the condition of the sun would not be unfelt in the corona, and the observations show beyond a question that this is the fact. And it is certainly *a priori* possible that the earth also may feel the effect in its climatic and other conditions; the result of the eclipse goes somewhat to increase the probability of this by showing that the effects reach far above the solar surface. At the same time we think it cannot yet be regarded as ascertained that terrestrial climates are really affected in any sensible degree. Mr. Meldrum's results, obtained from a discussion of the Indian rainfall, are indeed held by many to have established it, but are objected to by others. There can be no question, however, that the subject deserves to be investigated in a broad and thorough manner.

V. We have left ourselves but little space for the discussion of the polariscopic and other results.

Of the former it must suffice to say that at least a dozen observers, and among them may be named several who have made the subject a specialty, as Professors Wright and Morton and Mr. Ranyard, found unmistakable evidence of strong radial polarization of the coronal light, and this with instruments of several different kinds. What was very remarkable, and is not yet explained, they found the polarization strongest close to the limb of the moon.

For the first time at this eclipse photographic evidence was obtained of this polarization by several parties. A double image prism was put in front of the object-glass of a small camera. Two images are then formed upon the plate, each marked by a band of deficient light; but the band on one of the pictures at right angles to that on the other.

It is very strange that one of the observers, and one of great authority, should have come to a result diametrically

opposed to all the rest, and yet such was the case. Dr. Hastings, of Baltimore, who observed as a member of Professor Holden's party, found *tangential* polarization. There is a great similarity between the phenomena produced by radial and tangential polarization, both being symmetrical with reference to the sun. Dr. Holden insists that his observations were made in such a manner as to preclude the possibility of mistake in the discrimination, while he considers that the methods used by other observers would easily admit of error. To this they dissent. The explanation of the discrepancy is yet to be found.

VI. Of the miscellaneous observations there is not much to say. None of the observers of reputation saw any of the strange phenomena often reported in connection with an eclipse, such as brushes of light at the cusps during the partial phase, nor did they see any evidences of a lunar atmosphere. The peculiar fringes or shadow-bands which flit across the landscape at the beginning and end of totality were very generally observed.

Mr. Edison applied his new tasimeter to show the heat of the corona with perfect success, and the Princeton party, with a thermopile placed at the extremity of a spectroscope devised for the purpose, attempted to measure the heat of the coronal spectrum. They obtained a doubtful indication of a heat-band in the ultra red; but the observation requires to be confirmed before the result can be received with any confidence.

VII. It remains to speak of the brilliant discovery which will always give the eclipse of 1878 a place in the annals of astronomy—the discovery of one, and perhaps two, intra-Mercurial planets by Professor Watson and Mr. Swift.

For many years the belief has been gaining ground that there must be either a planet or a group of planets between Mercury and the sun. Leverrier did more, perhaps, than any one else to give currency and authority to this idea. He showed that the motions of Mercury presented certain irregularities which could be explained by the action of a planet moving inside his orbit, and that no other probable cause for the irregularities could be found. Almost his last work was an elaborate discussion of certain observations of dark bodies seen

crossing the sun's disc by various observers during the last hundred years, and he endeavored to show that many of these observations could be explained and reconciled by the hypothesis of a planet moving in an orbit which he designated, or rather in one of a series of orbits, between which the observations at his disposal were not sufficient to discriminate.

In 1858, Lescarbault claimed to have discovered such a planet, and it is not certain that he did not, though a variety of circumstances conspired to throw discredit upon his observation ; but the name of Vulcan was proposed for it then, and has been awaiting a claimant ever since.

At every recent eclipse the planet has been looked for with more or less care, so that it became plain that if it existed at all it must be very minute. On the present occasion, this search was made a main feature in the programme of several of the parties. Professors Newcomb and Watson at Separation, Professor Holden at Central City, Mr. Swift at Denver, and Professor Hall and Mr. Wheeler at La Junta, besides several others, made it their principal business. Most of them saw nothing ; but Professor Watson, sweeping systematically with a four-inch telescope, found about the middle of totality a small star of the four and one half magnitude, some two or three degrees west, and a little south of the sun. He had devised a very simple but effective method of recording the position of an object at any moment, by merely making a mark with a pencil upon paper circles which he had attached to the axis of his instrument, thus determining the place with considerable accuracy without the necessity of stopping to read a graduation. He describes this star as round, with a small but sensible disc, and ruddy in its color—at least a full magnitude brighter than  $\theta$  Cancri, which star he also saw quite near the new one. Continuing his sweep, he came upon another star a little brighter than the first one, which he did not recognize, and marked upon his circles. Before he had time to verify his observations by a second pointing the sun came out. He was at once satisfied that the first object must be a planet ; as to the second, he at first thought it probable that it was the star  $\zeta$  Cancri, which he did not see unless this were it, although much brighter and farther from the sun than  $\theta$ . A careful examination of his circle

records has convinced him, however, that this can hardly be the case unless the instrument was unaccountably disturbed, and accordingly he thinks this second object must also have been a planet.

Of the other searchers, Mr. Swift alone seems to have seen either of them, and his account is difficult to reconcile with the record of Professor Watson's circles. He reports seeing, with an instrument very nearly the same as Mr. Watson's (but without circles), "two stars of the fifth magnitude, about  $3^{\circ}$  south-west of the sun, both red, and about  $12'$  apart. Subsequently he changed the distance to  $7'$  instead of  $12'$ . The most natural hypothesis at first is that he saw Professor Watson's first object and the star  $\theta$ . But they were nearly a degree apart, instead of  $7'$ , and the line joining them, according to the circles, did not point towards the sun (as he says it did). If what he saw was Professor Watson's second object, and the star  $\zeta$ , the distance from the sun is about  $7^{\circ}$  instead of  $3^{\circ}$ , and the distance from  $\zeta$  to the supposed planet was nearly  $1^{\circ}$ . The line from  $\zeta$  through the planet was, however, directed to the sun.

It may be, of course that his observation relates to entirely different objects from Professor Watson's, and that they also were planets. No easy way of settling the question is apparent. The negative evidence of those who failed to find any such object would at first sight appear to have some force, but a little examination removes this impression. Professor Newcomb and Professor Hall confined their sweeps to a region north of the sun, and the instrument of Professor Holden, a mere hand telescope, was not powerful enough to show such small objects. Mr. Wheeler alone seems to have swept over the same region as Professor Watson with an instrument of sufficient power, and that he did not see the planet is fairly accounted for by the fact that he was obliged to use too high a magnifying power, not having a suitable eyepiece.

It is much to be regretted that the single observation of Professor Watson cannot give us any information as to the new planet's orbits; but of course taken by itself it cannot. It is perhaps not impossible that by some contrivance for screening the object-glass of a large telescope from the direct rays of the sun it may be possible to pick up these objects without waiting

for another eclipse, especially if the experiment should be tried at some elevated station where the atmospheric glare would be reduced to a minimum. A patient watch of the sun's surface will be sure to catch them some time or other, though it may be years first. And the watcher must have a good telescope and a keen eye, for if we can judge of their size from their brightness, these bodies cannot well measure three or four hundred miles across, and when projected on the sun would appear as spots not more than 1" in diameter—so minute that a practised eye and high telescopic power would be needed to see them.

From the preceding summary of observations, imperfect as it necessarily is from the fact that it rests mainly upon mere newspaper reports, which are almost always more or less inaccurate, it is evident that the recent eclipse has materially advanced our knowledge of the sun and his surroundings. It is an important point gained to have ascertained that the gaseous elements of the corona are greatly variable in their amount and condition, and still more important to know that this variation follows the cycle of the sun-spots. At the same time it has become highly probable that the coronal streamers and many of its most remarkable structural forms are composed of matter foreign to the sun, coming from sources of supply which are independent of the sun's condition. So also the discovery of Vulcan, or possibly of several Vulcans, is of great scientific value.

At the same time it is also evident that abundant opportunity remains for work and discovery at coming eclipses. It is altogether probable that the next time the ultra-violet portion of the corona spectrum will prove more interesting, and yield a less disappointing harvest to the spectroscopists. Knowing also that intra-Mercurial planets exist, it is quite likely that the planet hunters will succeed in making observations which, combined with Professor Watson's, will determine for us their approximate orbits, and make it easy to catch them as they cross the sun.

In conclusion, we append the following list of total eclipses to occur during the remainder of the present century. It rests

upon the authority of Mr. Hind. It does not include all, but only such as are favorably situated for observation.

DATE.	LOCALITY FOR OBSERVATION.	DURATION.
1882, May 17 .....	Arabia and Egypt.	2' 00"
1883, May 6.....	Marquesas Islands.	5' 15"
1885, September 9.....	New Zealand.	2' 00"
1886, August 29. ....	West Africa.	6' 21"
1887, August 19 .....	Russia and Germany	3' 40"
1889, December 22.....	Angola, West Africa.	3' 34"
1893, April 16.....	Brazil.	4' 44"

CHARLES A. YOUNG.

## A CRITICISM OF THE CRITICAL PHILOSOPHY:

### A REPLY TO PROFESSOR MAHAFFY.

LOCKE was the most influential metaphysician of last century; Kant is the most influential metaphysician of this.

Locke's great work, "An Essay on Human Understanding," published in 1690, came into notice immediately. The age was ripe for it. Younger men, rejoicing in the advance of physical science, were becoming wearied of the logical forms of the schoolmen which had kept their hold till the close of the sixteenth century, and of the abstract discussions which still prevailed in the seventeenth century. Locke met the want of his age. His fresh observational spirit, his shrewdness and sagacity, his independence, and his very phraseology, which carefully avoided all hack and technical phrases, recommended him to the rising generation. He called attention to internal facts, even as Bacon and Newton had to external; and if he did not himself notice and unfold all the delicate operations of our wondrous nature, he showed men where to find them. But philosophy—like faith, as the great Teacher said, like physical science, as Bacon showed—is to be tried by (not valued for) its fruits. The influence exerted by him has been and is of a healthy character. But there were serious oversights and even fatal errors in his principles; and these came out to view in the systems which claimed to proceed from him—in the idealism of Berkeley, the sensationalism of Condillac, and the scepticism of Hume.

By the second half of the eighteenth century thoughtful minds began to see the need of a reaction against the extreme experientialism which had culminated in the Scottish sceptic,

and there appeared two great defenders of fundamental truth—Reid in Scotland (1764) reaching in his influence over his own country, over France, and over the United States; and Kant in Germany (1781) laying firm hold of his own land, and then passing over into France, Britain, and America, and latterly penetrating into Scandinavia, Greece, Italy, and Spain. Kant's influence, like Locke's, has been on the whole for good. He has established fundamental mental and moral principles, which are seen to be fixed forever. He has taken us up into a region of grand ideals, where poetry, led by Goethe and Schiller, has revelled ever since. But there were mistakes in the philosophy of Kant as well as in that of Locke. These have come out like the dark shadow of an eclipse in the idealism of Fichte, the speculative web woven by Hegel, and in the relativity and nescience elaborated by Hamilton and applied by Herbert Spencer. There is need of a rebellion against his despotic authority, or rather a candid and careful examination of his peculiar tenets, with the view of retaining what is true and expelling what is false. This is the more needed, as all the agnostics and the physiological psychologists when pushed fall back on Kant. Professor Mahaffy acknowledges, "Of late the Darwinists, the great apostles of positivism, and the deadly enemies of metaphysics, have declared that he alone of the philosophers is worthy of study, and to him alone was vouchsafed a fore-glimpse of true science." I believe that we cannot meet the prevailing doctrine of agnostics till we expel Kant's nescient theory of knowledge, and that it is as necessary in this century to be rid of the *Forms* of Kant as it was in the last of the *Ideas* of Locke, both being officious intermeddlers, coming between us and things.

In a late number of this REVIEW (January, 1878) I ventured on a short criticism of Kant. The article was meant to be a challenge. I am glad it has called forth so able a champion as Professor Mahaffy (July, 1878). He is a distinguished member of Dublin University, which, having for nearly a century and a half followed Locke, with a leaning towards its own Berkeley, seems of late to have gone over to the camp of Locke's great rival, Immanuel Kant. Professor Mahaffy has studied Kant profoundly, and has written valuable fragmentary volumes, which

I hope he may complete, and thus give us his full view of the Critical Philosophy. I feel that I have an able opponent, and that I need to brace myself for the contest.

In criticising the great German metaphysician, it is not to be understood that I wish to disparage him. I place him on the same high level as Plato and Aristotle in ancient times, as Bacon and Descartes, Locke and Leibnitz, Reid and Hamilton, in modern times. For the last quarter of a century I have expounded his philosophy, with that of the others referred to, in my advanced classes in Queen's College, Belfast, and Princeton College, America. The professor is so kind as to apologize for me by alleging that I have not turned my mind very seriously to the subject. He mentions, to the credit of his college, that Dr. Toleken, in 1862, set a paper for a competition for fellowships in Dublin requiring a knowledge of Kant, "which came like thunder out of a clear sky." I am almost tempted to repeat the vulgar joke as to Trinity College being behind the age, as its clock is a quarter of an hour behind the sun and the rest of the world! So early as 1852, on my becoming a teacher of philosophy in Queen's College, Belfast, I set questions on Kant, and ever since, in that college, in the Queen's University, the great Indian competition and that of Ferguson scholarships, open to all the universities of Scotland, I have from year to year put queries implying that those who answer them know somewhat of the Critical Philosophy. In my work on the *Intuitions of the Mind*, if he will condescend to look into it, he will find that in no fewer than forty-eight places I have criticised favorably or unfavorably the system of the German metaphysician.

There is much in Kant that I commend. I like the very end aimed at in his philosophy. It is to give us an inventory of what he calls the *à priori*, but I would rather designate as the intuitive or fundamental, principles of the mind. "For this science is nothing more than an inventory of all that is given by pure reason systematically arranged" (Pref. to K. R. V.). These had constantly been appealed to, but there had been no careful inquiry into their nature and the law of their operation. Kant did great service to philosophy in attempting a systematic arrangement of them, but unfortunately he did so in an exclusively *Critical*,

whereas he should have done so in an enlarged *Inductive* method. He introduced clearness into metaphysics by drawing the distinction between analytic and synthetic judgments, the former simply evolving in the proposition what is involved in the subject, as when we say "an island is surrounded with water," the latter predicating something more as when we say "Sicily is an island in the Mediterranean." He was right in saying that the problem of the existence of metaphysics depends on the circumstance that there are in the mind synthetic principles *a priori*, or as I prefer stating it, perceived by the mind at once on the mind being directed to the objects, as that "every thing that begins to be has a cause." His classification in the Categories of the relations which the mind of man can discover is worthy of being looked at by all who are studying the comparative powers of the mind—only the relations are discovered in the objects, and are not imposed by the mind itself. He has laid a deep and immovable foundation for ethics; and his phrase the Categorical Imperative is the most expressive that has ever been employed to designate the office of the conscience. We should also be grateful to him for his noble defence of the freedom of the will. These are only the chief of the high excellencies I find in the Kantian philosophy.

But I object to three fundamental positions of Kant.

I. *I object to his method.* It seems that in the Leibnitz-Wolffian school, in which he was trained, he was led to favor the Dogmatic method of Descartes and Leibnitz. But the inquiring spirit of the times and his own reflection convinced him that this method was very unsatisfactory, as each man or school had set out with his or its own dogma, and people were now unwilling to accept, on any authority, dogmas which had not been sifted by an accredited test. Following the manner of the matter-of-fact age, he then turned to the "empiricism," as he calls it, of the "celebrated Locke." But he drew back when he saw what consequences were drawn from it by Hume. Dissatisfied with these methods, he elaborated, expounded, and illustrated a method of his own—the Critical Method.

There may be a legitimate use of each of these methods if it is kept within proper limits. All inquirers have to assume

something, which may be called a dogma ; but they must be ready to show grounds for making the assumption. A narrow empiricism may miss, as certainly Locke did, some of the deepest principles of the mind—may not notice first or intuitive principles. There is need of a criticism to distinguish things which are apt to be confounded in hasty assumptions and generalizations. But surely the true method in all sciences which have to do with facts, as I hold that all the mental sciences have, is the inductive, care being taken to understand and properly use it.

The agent, the instrument, the eye, the sense employed in the induction of the facts, is self-consciousness. By it we notice the operations of the mind, directly those of our own minds, and indirectly those of others as exhibited in their words, writings, and deeds. What we thus notice is singular and concrete, like the facts perceived by the senses. But we may proceed to abstract and generalize upon what we observe, and in this way discover laws which are to be regarded as the laws of our mental nature. In pursuing the methods we find laws or principles which are fundamental and necessary. Aristotle called them first truths ; others have called them by other names ; Kant designates them *à priori* principles, and represents them as pronouncing synthetic judgments *à priori*. I hold that they perceive objects and truths directly and immediately, and hence may be called intuitions. They act prior to our observation of them ; they act whether we observe them or not. It is the business of the metaphysician to look at their working, to determine their exact nature, their rule of action, and the authority which they claim. His inspection of them does not make them operate, or determine their mode of operation. He can watch them because they act and as they act, and his special business is to determine their laws. When he has done so he has found a metaphysical, what indeed may be regarded as a philosophical, principle. A system or systematized arrangement of such principles constitutes metaphysics or mental philosophy.

Kant was altogether right in saying that the end aimed at in metaphysics is to furnish an “ inventory ” or “ compendium ” of *à priori* principles. But he proceeded to attain this end in a wrong way—by the method of Criticism. Surely criticism must

proceed on acknowledged rules or tests. On what principles does Kant's criticism proceed? Kant answers, "Pure speculative reason has this peculiarity, that in choosing the various objects of thought it is able to define the limits of its own faculties, and even to give a complete enumeration of the possible modes of proposing problems to itself, and thus to stretch out the entire system of metaphysics" (Preface to Second Edition; Meiklejohn's translation). But must there not in that case be a prior criticism of reason to find out whether it can do this? And must not this criticism imply a previous one from higher principles *ad infinitum*? Certain it is that from the time of Kant we have had a succession of critical philosophies, each professing to go deeper down than its predecessors, or to over-top them. Fortunately—I should rather say wisely—Kant takes the forms of common logic, which are so well founded, as his criticising principles, and has thus secured valuable truth and much systematic consistency; only, these forms have helped to keep him from realities.

But Professor Mahaffy asks with amazement whether we are to accept without criticism the saws of the common people, or the dogmas of speculators, no one of whom agrees with his neighbor. To this I reply that it has always been understood that there is criticism in the inductive method. Bacon would have us begin induction with the "necessary rejections and exclusions." Whately and logicians generally speak of the necessity of "analysis," and Whewell enjoins "the decomposition of facts." But this analysis, or criticism, if you choose to call it so, must be applied to facts, in the case of mental science as made known by internal observation. It must aim at separating the complexity of facts as they present themselves, and this in order to discover the law of each of the elements, and to keep us from making assertions of one of these which are true only of another, and of the whole what are true only of some of the parts. Our aim in metaphysics is to discover what truths are intuitively known, and for this purpose we must distinguish them from their concomitants, in particular from all mere contingent or empirical truths. All professed metaphysical principles are attempted generalizations of our intuitive perceptions and judgments. But these generalizations are in

the first instance apt to be crude, by reason of mixing up other things with primitive intuitions. Even in more advanced stages of philosophy metaphysicians are apt to lay down imperfect and mutilated principles to support their theories. There is therefore need of a criticism to distinguish things that differ, but which are mixed together in experience, or are put in one category by system builders. But in our examination we are not to put ourselves above the facts. We must be at special pains not to override or mutilate them, still less to twist or torture them. Our single aim should be to apprehend and express them accurately, and apply them legitimately, that is, only to the objects on which they bear. Kant speaks (Preface to Second Edition) of "purifying the *a priori* principles by criticism ;" whereas the proper office of the metaphysician is simply to discover what they are, and to formulate them without addition or diminution.

It is not to be understood that our observation of these principles gives them their being, and still less that it gives them their authority. Our notice of them does not give them existence. We notice them because they exist. By observation we can discover that they exist, and find the extent and limits of their jurisdiction and authority. Truth is truth, whether we observe it or not. Still, observation has its place, and without a very careful induction, metaphysics are sure to be nothing else than a system of arbitrary dogmas. The induction does not give them their title. They have their authority in themselves, but observation makes their title known to us. Kant is constantly asserting that metaphysics are independent of the teaching of experience, and that they must not call in experience. They are independent of experience as that mountain is independent of my eye. Still it is only by my eye that I can see the mountain.

A metaphysical philosophy can be constructed only by the induction of the operations of our intuitions. We can give the marks and tests of our intuitions. Their primary and essential character is not necessity, as Leibnitz held ; nor necessity and universality, as Kant maintained ; but self-evidence : they look immediately on things, and contain their evidence within themselves. Being so, they become necessary, that is, have a

necessity of conviction, which is the secondary test, and universal, that is, entertained by all men, which is their tertiary corroboration. Professor Mahaffy thinks that in holding these principles I am in company with Mill and Bain: "Surely Dr. McCosh is not going to prove another Bain to mental philosophy." I am sure that I can meet Mr. Bain far more effectively on my principles than Mahaffy can on the nescient principles of Kant, which Bain and his whole school are most willing to adopt.

After, but not till after, having discovered and co-ordinated intuitive principles, we may then, if we are determined, inquire whether they are to be trusted. Such an investigation cannot, I fear, be very fruit-bearing; the result must be mainly negative. It is an attempt to dig beneath the ground on which the building rests, to fly above the air. Still by such a process we may be able to show that our intuitions confirm each other, and thus yield not a primary, but a secondary or reflected, evidence of their trustworthiness. It can also be shown that they do not contradict each other; that there is nothing in them to countenance the alleged antinomies of Kant, Hegel, Hamilton, or Spencer, all of which are contradictions, not in things or our intuitive convictions, but simply in the mutilated propositions drawn out by these men. But in the first and last resort we are to rest on the circumstance that these first principles are of the nature of intuitions looking directly on things.

II. *I object to Kant's Phenomenal theory of knowledge.* Hume opens his "Treatise of Human Nature:" "All the perceptions of the human mind resolve themselves into two distinct kinds, which I call impressions and ideas." The difference between these consists in the greater liveliness of the impressions. Under impressions he includes such heterogeneous mental states as sensations, perceptions, emotions, and I should suppose resolutions. Under ideas he has memory, imagination (often as lively as sensation), judgment, reasoning, moral convictions, all massed together. There is no evidence that Kant ever read the "Treatise of Human Nature," in which Hume's whole theory is developed; and it is certain that he had never studied it carefully. He seems to have got his views of Hume's doctrine from his Essays, into which for popular effect he broke up his elaborate work, and he sought more particularly to

meet Hume's doctrine of causation. Now, Kant's aim was to meet the great sceptic. In doing so he wished to make as few assumptions as possible. Let us assume what no one can deny. Hume had said, "As long as we confine our speculations to the *appearances* of objects to our senses, without entering into disquisitions concerning their real nature and operations, we are safe from all difficulties." At this point Kant starts : Let us assume the existence of an *appearance*—Hume's very word.

Now, Kant, as it appears to me, should have met Hume's very first positions. The mind does not begin with *impressions*. The word is vague, and in every way objectionable. It signifies a mark made by a harder body, say a seal, upon a softer body, say wax. Taken literally, it implies two bodies—one impressing, the other impressed ; applied metaphorically, it indicates a body to impress and a mind impressed. As applied to our perceptions by consciousness, say of self as thinking, and our purely mental acts, as our idea of moral good, it has and can have no meaning ; for there is nothing external impressing, and the operation has nothing whatever of the nature of an impression. Kant should have met these primary positions. But he concedes them. In doing so he has broken down his walls of defence, and admitted the horse fashioned by the deceit of the enemy, and is never able to expel him or counteract the evil which he works.

An impression, if it means any thing, implies a thing impressed. An appearance, if we understand it, means a thing appearing, and it seems to imply a being to whom it appears. An impression without a thing impressed is an abstraction from the thing impressed. An appearance is an abstraction from a thing appearing. As all abstractions imply a concrete thing from which they are taken, so all appearances imply a thing known as appearing.

It has been commonly allowed, since the days of Locke, that man's two original inlets of knowledge are sensation or sense-perception, and reflection or self-consciousness. Kant speaks everywhere of an outer and an inner sense. Now, I hold that by both of these we know things. By sense-perception we know our bodies and bodies beyond them ; and Kant

says correctly, " Extension and impenetrability together constitute our conception of matter" (K. R. V., Translation, p. 379). There may be disputes difficult to settle—as what are our original and what our acquired sense-perceptions, whether of our bodily frame or of it with objects affecting it ; but our acquired imply original perceptions, and both in the first instance or in the last resort contemplate objects as extended, and exercising some sort of energy. It is, if possible, still more emphatically true that self-consciousness reveals not mere appearance, but self as a thing, say as thinking or feeling.

But what, it may be asked, is the proof of this? To this I answer, first, as an *argumentum ad hominem*, that we have the same proof of it as we have of the impression, of the presentation, of the phenomenon. Whatever those who hold these slippery theories appeal to, I also appeal to ; and I am sure that the tribunal must decide in my behalf. I have the same evidence of the existence of a thing impressed as I have of the impression, of the thing appearing as I have of the appearance. But secondly, and positively, the position I hold can stand the tests of intuition. It is self-evident ; we perceive the very things, say the nostrils as affected, or self as reasoning. We do not need mediate proof ; we have immediate. It is also necessary : I cannot be made to believe otherwise that I do not exist, or that there is no body resisting my energy. It is, farther, universal, as admitting no exceptions, and as being held by all men, young and old, savage and civilized. It can thus stand the tests used by Kant, which are the two last.

Let us now turn to the account given by Kant. According to him, we know mere appearance ; and his definition is, " the undetermined object of an empirical intuition is called an appearance or phenomenon." Speaking of the rainbow, " not only are the rain-drops mere phenomena, but even their circular form, nay, the space itself through which they fall, is nothing in itself, but both are mere modifications or fundamental dispositions of our sensuous intuition, while the transcendental object remains for us utterly unknown" (Translation, p. 38). This is his account not merely of material objects, but of space, time, and self. " Time and space, with all phenomena therein, are not in themselves things. They are nothing but

representations, and cannot exist out of and apart from the mind. Nay, the sensuous internal intuition of the mind (as the object of consciousness), the determination of which is represented by the successive states in time, is not the real proper self as it exists in itself, nor the transcendental subject, but only a phenomenon which is presented to the sensibility of this to us unknown thing" (Translation, p. 307).

Professor Mahaffy calls on me to define what I mean by thing. I answer that it is one of those simple objects which according to all logicians cannot be logically defined; not because we do not know it, but because we know it at once, and cannot find anything simpler or clearer by which to explain it. All that we can do positively is to say that it is what we know it to be; or to express it in synonymous phrases, and call it a being or an existence. But we may, as logicians allow in such cases, lay down some negative propositions to face misapprehensions, and to distinguish it from other things with which it may be confounded. 1. It is not an abstract or general knowledge, say of *to or* or essence or being; or of a quality, say form or thought; or of a maxim, say that a property implies a substance. Our primary knowledge is in no sense a science which is knowledge systematized. But the knowledge thus arranged is real knowledge, and because it is so science is to be regarded as dealing with realities, and gives no sanction to agnostics or nihilism. 2. This thing is not a mere appearance. What appears may be known very vaguely—it may be a cloud, a shadow, or image of a tree in a river. Still it is a reality—that is, a real thing; it consists of drops of moisture, of a surface deprived of light, or of a reflection. 3. Man's primary perception is not of a relation between objects, but of objects themselves. When I see a round body I see it as a round body. I may also be conscious of myself as perceiving it. Having these two objects, I may discover a relation between them, and find that the round body affects me. But I first know the round body and the self, and as existing independent of each other. The round body may be seen by others as well as me, and the self may next instant be contemplating a square body. Holding by these positions we are delivered from both the phenomenal and relative theories of

knowledge of body and mind, and find that we have real things, between which we may discover relations which are also real. A relation without things has always appeared to me to be like a bridge with nothing to lean on at either end.

The thing which I thus posit is, I admit, not the same as that of which Kant speaks. We are told that Kant had two kinds of sensible knowledge—things as phenomena, and things *per se*. I have been asserting that we know more than phenomena. I allow that what I assume is not the thing in itself—the *Ding an sich*, as Kant expresses it; the thing *per se*, as Mahaffy translates it. I confess that I do not understand what is meant to be denoted by this phrase, which seems to me to be of a misleading character, as seeming to have a profound meaning when it has no meaning at all. If I have the thing I do not care about having the *in itself*, as an addition—if, indeed, it be an addition. It is enough for me that I know the thing, the very thing, and I may wish to know more of the thing; and this I may be able to do, but only by making additions in the same way as I have acquired my primary knowledge. As to the *thing in itself*, it always reminds me of the whale that swallowed itself.

I do believe that Kant, like Locke, wished to be a realist, but both had great difficulty in getting a footing on *terra firma*; Locke by making the mind perceive only ideas, and Kant because he made it perceive phenomena, which are only a more fugitive form of ideas. He opposes idealism, and maintains that the internal implies the existence of the external—a very doubtful argument, as it appears to me, unless we give the internal the power of knowing the external. He is quite sure that there is a *thing*, a *Ding an sich*. But then he admits that we can never reach it, can never catch it. The thing does exist, but then it is a thing unknown and unknowable, and we land ourselves in contradiction if we suppose that we know it. Kant is thus the true founder and Hamilton the supporter (both without meaning it), and Spencer the builder of the doctrine of nescience or agnostics, underlying so much of the philosophic and physical speculation of the present day.

We can avoid these consequences only by making the mind begin with a reality. If we do not begin with it we cannot

end with it. If we do not assume it we cannot infer it. "How can we reason but from what we know?" and if there be not knowledge and fact in the premiss assumed, we cannot, as Kant knew well, have it in the conclusion without a gross paralogism.

I am now in a position to expose, I do not say the perversion, but the extraordinary misunderstanding, of my views in Professor Mahaffy's article (233-4). Has he, like some other Kantians, had his head so dizzied by the windings of the labyrinth through which he has been led that he is not capable of steadily looking at the opinions of those who take a different view of knowledge? He represents me as "offended at Kant's rejection of any pretended knowledge of the *Ding an sich*," whereas I have been seeking to drive away the *an sich* as a phantom. He says of me that I think "human knowledge not to be confined to phenomenal objects," whereas I hold that we know objects as appearing. I am bound, he argues, "to follow and discover the absolute nature of things apart from their manifestation and our faculties," whereas I carefully avoid the word absolute, applying it only to God; and I hold that our faculties are organized so as to know things, but only in part. He says my theory looks like Hegelianism, whereas I seek to undermine Hegelianism by undermining Kantism; and I arrive at a genuine, while Hegel caught only an ideal, reality. Then my doctrine "is more like old Reid's than any thing else." My remark here is that Reid is not much older than Kant; and I do not reckon it a valid objection that my doctrine is the same with Reid's. I verily believe that Reid meant to express the same doctrine as I have done, but that he did not do so; and that we are now able to formulate our statement more accurately because Kant has compelled us to do so. Hamilton, I may add, was kept from giving the exact expression because he was turned aside by Kant to a doctrine of relative knowledge. Then he charges me with maintaining that "our knowledge consists in comparing and classifying our impressions; whereas I hold that we compare and classify not impressions, but things, and that we may compare and classify our intuitions and thus attain philosophic truth. He alleges that I have come back, at the point referred to, to Kantism, and ad-

mitted that we know nothing but appearance, while I have cast away the safeguard of our science, and have sunk to the position of Mill and Bain, and made all our knowledge empirical, and made up of the generalizations from experience. Now, I hold the very opposite of all this, and maintain resolutely that we know things, that we know them immediately, that we have intuitive knowledge, and that this knowledge is not empirical, but native, primitive, and necessary. Finally, he charges me with holding that "mathematical truths are inductions," and that "it is repeated observations which have taught us that two right lines cannot inclose a space." In opposition to all this, I have taught that we see at once, on the bare contemplation of right lines, that they cannot inclose a space, and that mathematical axioms are generalizations not of outward facts, but of our intuitive perceptions. Having thus put the two views, the Kantian and my own, in juxtaposition, I must allow those who are competent to judge to decide which is in most accordance with consciousness.

III. *I object to Kant's doctrine of the mind imposing Forms on things appearing.* This error connects itself with the previous ones. Man is supposed to perceive not things, but appearances, and he calls in forms to give unity to scattered appearances. These forms are void in themselves, they need a content, and they are applicable to objects of possible experience, but to nothing else. The language is meant to express a truth, but it fails to do so. Would it be correct to represent the law of gravitation, as a form, void in itself, and capable of being applied to matter and its molecules? The correct statement is that gravitation is a property of matter. In like manner, the original endowments of mind are powers in the mind itself, enabling us to know things. Kant maintains that it must either be the external that determines the internal, or the internal that determines the external. The experientialist makes the external determine the internal, makes the mind simply reflect what passes before it. Kant maintains in opposition that the internal determines the external, and he would thus raise a breakwater in the mind itself against materialism and scepticism. But surely the natural and rational supposition is that the internal *perceives* the external, and it should be added

the internal also. The primitive intellectual exercises of the mind are perceptions looking at things. By sense-perception we perceive external objects in our body or beyond it as they are presented to us, and we know them as extended and resisting our energy. By self-consciousness we know self as thinking, imagining, hating, or loving. These exercises are all singular, but we can generalize them and thus discover the laws of our perceptions—be it observed, perceptions of things, and not impressions or appearances—and these form an important department of metaphysic, which becomes a positive department of true science, and not a mere police, as Kant would make it, to preserve us from error. We have here in the mind principles which, looking to things, give us fundamental truths.

But Kant gives to these principles not a mere perceptive, but a formative power. Our intuitions are not perceptions, looking at things and the relations of things, but moulds imposing on objects what is not in the objects. Our primary knowledge thus consists of two elements, one *à posteriori* from experience, the other *à priori* from the stores of the mind. I have had great difficulty in finding exactly what is the *à posteriori* matter furnished by the senses. In the Introduction he seems to tell us what belongs to sensuous experience—"color, hardness or softness, weight, impenetrability;" and in the opening of the Transcendental *Æsthetic* he gives us as belonging to sensation, "impenetrability, hardness, color, etc." It is rather strange to find impenetrability here, as it implies both force and extension, which I suppose he ascribed to the forms of the mind. It shows what difficulty he is in when he would thus refer some elements to sensation or experience, and other elements to the forms in the mind. We free ourselves from all these when we simply assume that in sense-perception we know things as having extension and impenetrability. But Kant, while he allows that we get so much from sensation and experience, derives other things from the mind itself, and these are imposed on objects. When I look on a rose I have merely scattered phenomena, such as colors, odors, shapes, and the mind combines them in space by its own forms. I have in the mind scattered impressions and ideas, and the formative intuition connects them in time. We have now knowledge, and

knowledge of objects, but the main element is contributed by the mind ; and it is this element which like a rock beats back the waves of scepticism. But it has in fact allowed the entrance of a more subtle scepticism than that of Hume. In all cases the subjective element joins on to the objective and adds to it, and we cannot tell what is the object as a thing as distinguished from the subject. For if the formative mind may add one thing, why not ten or twenty, till we know not what we have? We may now look at the various kinds of *à priori* elements specified by Kant : (1) Our sense intuitions contribute space and time to the phenomena. (2) Our understanding imposes certain categories on our intuitions. (3) Our reason supplies ideas which unite the judgments.

*The Æsthetic.*—Kant says, “Our nature is so constituted that intuition with us never can be other than sensuous.” The word “sensuous” is apt to leave a bad impression, and has in fact left such an impression, as it seems to represent all intuition as being of the external senses. But he evidently means to include in the phrase our internal sense or self-consciousness. Both these senses perceive only phenomena. Even self-consciousness gives us nothing more. “The subject intuited itself, not as it would represent itself immediately and spontaneously, but according to the manner in which the mind is internally affected, consequently as it appears, and not as it is” (K. R. V., Translation, p. 41). I may give another passage or two as translated by Mr. Mahaffy (Critical Phil. for English Readers) : “The internal sense by which the mind intuited its own internal states gives us no intuition of the soul as an object.” “Our self-consciousness does not present to us the ego any more distinctly than our external intuition does to us foreign bodies ; we know both only as phenomena.” He does not seem to ascribe much to this internal intuition. “The notion of personality though *à priori* is not an intuition at all,” but “a logical supposition of thought.” At this point, that is, at his account of our internal intuition, our higher British and American metaphysicians are most inclined to leave him.

The forms of sense are, space of the external and time of the internal. I may remark in passing, that I do not see why time should be confined to the internal sense, as external

events as well as internal experiences are all in time—indeed in some places Kant speaks of time as a form of both senses. But it is of more importance to remark that both space and time are given to phenomena by the mind. But is this in accordance with our consciousness or spontaneous beliefs? Intuitively and necessarily all men look on these as objective, and existing independent of our contemplation of them. If it is asked what they are, we can answer negatively that they are not substances or relations, but that they are what we intuitively perceive them to be. We may put a hundred questions about them which we cannot answer; but our ignorance on these subjects should not keep us from holding by their objective reality.<sup>1</sup>

Professor Mahaffy maintains that Kant holds the reality of space and time. There is truth in this statement. He believed space and time to be as real as the things perceived in them. But the reality of all three was of a most unsatisfactory character. He did not allow that the mind intuits or envisages real objects. That fatal seed has sent a stem upward, idealism, which has risen into emptiness, and a root downward, which has

<sup>1</sup> The Kantians labor to show that they can explain by their forms the certainty and the necessity of mathematical truths, which are just the evolution of what the mind imposes on appearances. "Kant found that he could not trace out and learn the properties of an isosceles triangle from what he saw in it, or from mere thinking about it, but rather from what he had added to the figure in his own mind *a priori*, and had them represented by a construction. He also found that all the safe *a priori* knowledge he could obtain about it was merely the necessary consequence of what he had introduced into it according to his own concepts."—*Crit. Phil. for English Readers*, p. 12. But surely this leaves it utterly uncertain whether what we thus bring out of our minds can be asserted of veritable things; whether, so far as things are concerned, we can say that the angles of a triangle must be equal to two right angles; or whether parallel lines cannot meet. We have a much simpler and more rational way of accounting for the apodictic certainty of mathematics. We perceive lines and surfaces as realities; we agree to look solely to the length of lines and the length and breadth of surfaces; and as we do so we discover that they have certain properties involved in their very nature, and that the three angles of a triangle are together equal to two right angles, and that parallel lines cannot meet. The properties of the ellipse, as demonstrated by Apollonius, were ready to be applied to the planetary orbits when Kepler showed that they moved in elliptic orbits. As to the difficulty that if space and time be real there must be two infinities, see *Intuitions of the Mind*, p. ii. b. ii. c. 3, and for mathematics p. iii. b. ii. c. 3.

landed in nihilism. Kant labored in vain to save his philosophy from both these consequences, especially from the former, in his Second Preface, but utterly failed. Fichte, Schelling, and Hegel, dissatisfied, as well they might, with his negations, were bent on having higher realities, and raised beautifully formed and gilded clouds. The positivists, and all who have ramified from Comte, all fall back on the nescience of Kant.

*The Analytic.*—Kant was Professor of Logic and Metaphysics at Königsberg. He uses logic to give him metaphysics. He has now by the understanding (der Verstand) to combine the results got by sense, and get judgments and propositions. He adopts the classification of propositions common in his day. Judgments may be pronounced in

QUANTITY, QUALITY, RELATION, MODALITY.

I do not mean to criticise this division, which is not the received one in the present day. The notions are combined by what he calls categories, being, as all his critics have remarked, different in their end from the categories of Aristotle. Each of the four divisions has three subdivisions, making in all twelve, with which every reader of Kant is familiar. I am not to examine them individually. I am simply to look at the functions allotted to them.

Equally with space and time they are Forms. They have their seat and power in the mind. The forms of sense were imposed by the mind on appearances. The forms of the understanding—that is, the categories—are imposed on, and give the intuitions of sense their unity. The question with me, What is the reality implied in the judgments of the understanding? Already the reality has very much disappeared. In the intuitions of the senses there had been so much of a reality as is implied in the appearances which, however, have always *à priori* forms imposed on them. Now, the judgment is pronounced on this complex of appearance and intuition, and the reality has all but vanished. The categories are “nothing but mere forms of thought, which contain only the logical faculty of uniting *à priori* in consciousness the manifold given in intuition. Apart from the only intuition possible for us, they have still less meaning than the pure sensuous forms space and time; for

through them an object is at least given, while a mode of connection of the manifold, when the intuition which alone gives the manifold is wanting, has no meaning at all."

This is not, as it appears to me, the natural or the true account. I hold that the mind, first by its cognitive power of sense, external and internal, knows things, and then by the understanding or comparative powers discovers various kinds of relations between things. Of course, if the things be imaginary the relations may also be imaginary. Thus we may say that Venus was more beautiful than Minerva, and both the terms and the propositions are unreal. But when the intuitions are of realities, when I am speaking of Demosthenes and Cicero, and declare Demosthenes to be a greater orator than Cicero, there is a reality both in the terms and the propositions.

Here it will be necessary to correct an error into which the whole school of Kant has fallen. They deny that the understanding has any power of intuition: *der Verstand* cannot intuite. I maintain, on the contrary, that it has, the statement being properly explained and understood. The comparative powers presuppose a previous knowledge of things by the senses and consciousness, and they give us no new things. But having such a knowledge, the mind, by barely looking at the things apprehended, may discover a relation between them, and this intuitively by bare inspection, without any derivative, immediate, or discursive process. Thus understood, we may have intuitive or primitive judgments as well as perceptions. These constitute an important part of the original furniture of the mind, and should be included in our inventory.

Taking the category of cause and effect as an example, let me exhibit the difference between the view elaborated by Kant and that which I take. We affirm that the cause of that rick of hay taking fire was a lucifer-match applied to it. What have we here? According to Kant, a rick or an appearance, partly *à posteriori* with a certain color, and partly *à priori* with a form given it. We have also a lucifer-match with a like double character, *à priori* and *à posteriori*. We unite the two by means of an *à priori* category, that of cause and effect, and declare the lucifer-match to be the cause of the conflagration. Is this the real mental process? Let me give in contrast what

I believe to be the true account. We have first the rick as a reality, and then the match as a reality, both known by the senses and information we have had about them. On looking at the rick and discovering a change, we intuitively look for a cause, and on considering the properties of the lucifer-match, we decide that it is fit to be the cause. We have thus realities throughout, both in the original objects and the relations between them.

It is not necessary for the purpose I have in view, which is simply to criticise Kant as he is commonly, and I believe correctly understood, to enter upon a discussion as to disputed points. In treating of the categories, he brings in an *à priori* "I think" as running through all our judgments and imparting a unity to them. There is truth here, but it is not correctly unfolded. The correct expression is: By self-consciousness we know self in its present state—say as thinking, and this knowledge of self goes with all our states, and among others our acts of judgment. I am still less called on to enter upon his *à priori* use of the imagination and of the schematismus. Both are meant to bridge over gaps in his system. It is true that if an object be absent and we have to think of it, we must have what Aristotle calls a phantasm of it. Kant calls in an *à priori* imagination to represent to the judgment the manifold of the senses in unity. I regard it as the proper function of the phantasy to represent absent objects to the understanding that it may judge of them. The function of the schematism is to show how the categories which are *à priori* forms are applicable to the empirical intuitions of sense. I do not need such an intermediary, as I hold that the mind can at once know things and the relations of things.

*Dialectic.*—Kant is nothing if not logical. He has now with logicians to rise from judgment to reasoning, from der Verstand to die Vernunft, which gives a unity to the judgments. This is done also by mental forms, which he calls ideas. I need not dwell on what almost all his critics have noticed—his confounding the reason and reasoning, the first of which sees certain truths immediately, whereas the other needs a process. Reasoning takes three forms, which give us three ideas: "All

human cognition begins with intuitions, proceeds from thence to conceptions, and ends with ideas."

**REASONING.**—Categorical,      Conditional,      Disjunctive,  
*Ideas.*—Substance,   Interdependence of Phenomena,   God.

I enter not on the inquiry whether there are three kinds of reasoning, or whether reasoning is not always one and the same. But I must state that I have a difficulty in apprehending how the ideas as forms give the reasoning, or how the ideas result from reasoning, how God results from disjunctive reasoning. But my search is after the reality supposed to be in these ideas. What reality remains, except indeed a subjective reality implying an objective existence? Is it not virtually gone? It has been reflected from mirror to mirror till now nothing definable is left. There was a sort of reality, phenomenal and subjective, in the intuition; this had still an attached reality in the judgment. But it is difficult to detect it, and impossible to determine what it is in the third transformation—a reality or an illusion, a something or a nothing, a shadow or a reflection of a shadow. Kant acknowledges, "The categories never mislead us, objects being always in perfect harmony therewith, whereas ideas are the parents of irresistible illusions" (Translation, p. 394). These illusions are like the concave shape we give the sky; like the rising rounded form we give the ocean when we stand on the shore; like the foam made by the waters, which we may wipe away, but will speedily gather again. Kant is still pursuing the reality, the *Ding an sich*, but it is as the boy pursues the rainbow, without ever catching it. He argues powerfully that if we suppose these ideas to be realities we fall into logical fallacies.

**Substance.**—If we suppose substance to be real we have a paralogism. Kant examines the *cogito ergo sum* of Descartes. If the *ego* is in the *cogito* we have no inference but simply an assumption. If the *ego* is not in the *cogito*, the conclusion does not follow; we have merely an impression or idea. I am of opinion that we should not try to prove the existence of self by mediate reasoning; we should assume the existence of *ego cogitans* as made known by self-consciousness.

**Interdependence of Phenomena.**—At this point he maintains that we are landed in contradictions or antinomies—that is,

provided we look on the ideas as things. He resolves the antinomies by showing that we are not to imagine that what we affirm and can prove of phenomena is necessarily true of things. Those of us who hold that the mind can know things have to meet these contradictions. This we do by showing that the counter propositions are not proven—are in fact about things of which we have no knowledge; for example, as to whether the world is or is not limited in time and space. In other cases, the alleged contradictions are merely in our own mutilated statements, and not in the things themselves or our native convictions about them.

*The Theistic Arguments.*—He has a well-known threefold classification of them: the ontological, the cosmological, and the physico-theological. I have no partiality for the first two. So far as the first is concerned—that from the idea of the perfect in the mind—I am not sure that the idea of the perfect implies the existence of a corresponding being, though it may prepare us for receiving the evidence, and enable us to clothe the Divine Being, shown on other grounds to exist, with perfection. In regard to the second, I am not prepared from the bare existence of an object, say a lump of clay, to argue that it must have had a Divine cause. But I hold that the third argument—that from design—is conclusive if properly stated. Kant cannot acknowledge its apodictic validity, simply because it implies the principle of cause and effect, which he regards as having merely a subjective value. When we hold that the things in the world are real, then are we called to argue a real cause in a designer, which the idea of the perfect in the mind enables us to clothe with infinity.

*The Practical Reason.*—The part of the Kantian philosophy which is the strongest and healthiest is the ethical. No writer in ancient or modern times has stood up so resolutely for an independent morality which, it should be observed, is perceived not as a phenomenon or by artificial forms, but at once and directly by the practical reason. There may, he thinks, be legitimate disputes as to what things are, and the speculative reason may lead us into illusions, and even darkness and scepticism, but the moral power comes in to save and to reveal a categorical imperative, which lays down a law

binding on all intelligent beings. According to this law, men are responsible, have to appear at a judgment day, which implies a future existence and God to guarantee the whole. Morality, immortality, and God are thus indissolubly bound together.

I believe that Kant has substantially established his moral positions. They cannot be assailed, except on grounds which Kant himself unfortunately furnished. Kant admitted, indeed argued, that the speculative reason led to illusions, indeed to contradictions, on the supposition that we know things, and then brought in the moral reason to bring us back to truth and certainty. The risk in all such procedure is, that those led into the slough may be caught there and go no farther. For if the speculative reason may gender illusions, what reason have we for thinking that the practical reason gives us only truth? I do not admire the wisdom of those who first make men infidels in order to shut them up into truth as they feel the blankness of nihilism.

It was in mockery that Hume, after showing that reason leads into contradictions, allowed religious men to appeal to faith. There was far less shrewdness shown by those philosophers in the age following, who, after allowing that the intellect leads to scepticism, fell back with Jacobi and Rousseau on an ill-defined faith or feeling. The pursuing hound which had caught and torn to pieces the understanding, having tasted blood, became more infuriated, and went on to attack and devour the belief or sentiment. It is of vast moment, both logically and practically, to uphold the reason in discovering truth, if we would defend the reason in discovering the good. I deny that the reason ever lands us in contradictions or leads into error or even illusion. In the antinomies the mistakes are all in our own statements, and not in the dictates of our nature. The intellect does not lead to all truth, but if properly guided it conducts to a certain amount of truth, clear, well established, and sure. Beginning with realities, it adds to these indefinitely by induction and by thought. The speculative reason properly employed, so far from conflicting with and weakening moral reason, confirms and strengthens it.

Proceeding in our inductive method, with criticism merely as a subordinate means, we keep clear of that heresy into which

the Kantians have fallen of making a schism in the body, which in this case is not the church, but the mind. I cannot allow that one part or organ of our nature leads to error, and another to truth. I hope we have done with that style of sentiment, so common an age or two ago, which lamented in so weakly a manner, often with a vast amount of affectation, that reason led to scepticism, from which we are saved by faith, and which was greatly strengthened by Kant's doctrine of the practical reason coming in to counteract the illusion of the speculative reason. The account I have given above makes every part of our nature correspond to and conspire with every other. It does more—it makes every faculty of the mind yield its testimony to its Divine author. The understanding collating the facts in nature and the collocations therein, and proceeding on its own inherent law of cause and effect, which I represent as having an objective value, furnishes the argument from design. Then our moral nature comes in, and reveals a law above us and binding on us, and clothes the intelligence which we have discovered with love. I admit that the finite works of God do not prove God to be infinite. I believe no one ever said that they did. But this circumstance has made Kant and his school insist that thereby the theistic argument is made invalid. But as we call in our moral nature to clothe God with rectitude, so we call in that idea of the infinite, the perfect, which the mind has, and which was fondly dwelt on by Anselm, Descartes, and Leibnitz, to clothe him with infinity. Our nature is thus a harmoniously constructed instrument, raising a hymn to its Creator.

I cannot agree with Mr. Mahaffy in thinking that all philosophy was proceeding in the wrong road till Kant set it out on the right. On the contrary, I hold that the critical method, the phenomenology, and the *à priori* forms of Kant were all a departure from the genuine catholic philosophy which has been expounded by the profound and wise thinkers of all ages and nations. I should never think of charging the philosophy of Kant with producing the lethal influence of the scepticism of Hume. It has many and great redeeming qualities in its evolution of the high capacities and ideas of the human soul, and in the deep foundation it gives to morality. But it has

errors which, after lying latent for a time, have come out in that agnosticism which is at present laying an arrest on all high philosophic and religious truth.

I am quite aware that a large body of speculators will look down with contempt on the sober views I have been expounding, and not think it worth their while to examine them. Metaphysical youths from Britain and America, who have passed a year or two at a German university, and have there been listening to lectures in which the speaker has been passing along so easily, and without allowing a word of cross-examination, such phrases as subject and object, form and matter, *à priori* and *à posteriori*, real and ideal, phenomenon and noumenon, will wonder that any one should keep on such solid ground as I have done while they themselves are on such elevated heights. But I can bear their superciliousness without losing my temper, and I make no other retort than that of Kant on one occasion, "that their master is milking the he-goat while they are holding the sieve." I am sure that the agnostics, whether of the philosophical or physiological schools, will resent my attempt to give knowledge so firm a foundation. I may not have influence myself to stop the crowd which is moving on so exultingly; I may be thrown down by the advancing cavalcade; but I am sure I see the right road to which men will have to return sooner or latter; and I am satisfied if only I have opened a gate ready for those who come to discover that the end of their present broad path is darkness and nihilism.

I have ventured to suggest that there should be an understood unity of action among those who wish to oppose the prevailing philosophic tendency which combines in an incongruous manner materialism and agnosticism. I do not project the formation of a Solemn League and Covenant like my Scottish forefathers, or a Bund like the Swiss cantons, or a joint-stock company like our merchants. But as there is evidently an understanding and a co-operation and a determination to laud each other on the part of those who reject all positive truth, so there should be an attempt on the part of those who oppose them to combine in principle and in action. I will be glad if Scotland, provided she is not become altogether ashamed of

her old philosophy take a lead in this campaign.<sup>1</sup> I should rejoice to find Professor Mahaffy, with or (better) without the assistance of Kant, continuing to oppose Mill and Bain and Spencer. France has never followed Darwin as England has done, and there must be descendants of the schools of Descartes, Jouffroy, and Cousin ready to defend a spiritual philosophy. We might get Italian aid from Mamiani and Ferri, editors of the *La Filosofia delle Scuole Italiane*. There may be some in Germany, wearied of Hegelianism and pessimism on the one hand, and of Haeckel and materialism on the other, willing to have a philosophy derived from consciousness. But in this REVIEW I would address myself specially to the young men of America. The United States in their four hundred colleges have a greater number of professors of mental science than any other country, I believe than in all other countries, and some of these

<sup>1</sup> "As regards Hamilton," says Professor Mahaffy (Art. p. 213), "it seems ungracious to bring up against him another case of inconsistency, seeing he has received such severe justice at the hands of the present generation in philosophy. His teaching may be called extinct, and it will be difficult in the history of philosophy to find a man more overrated while he lived and despised as soon as he was unable to defend his own opinions." Is there any thing here of the old jealousy of Edinburgh on the part of Dublin? It is certainly humiliating and unpleasant to reflect that while Hamilton called forth a greater number of distinguished pupils than any metaphysician of his age, no one of these has made any effort to defend him. I was one of the first to criticise him, which I did when his pupils regarded him as infallible. Were I ten years younger than I am I would be strongly inclined to say a word in behalf of this philosophy, which was injured mainly by his so far departing from the inductive spirit of Reid to go over to the critical method of Kant. I am tempted to add that I might be inclined, did other pressing duties admit, to say a word in behalf of Mr. Mill's Inductive Logic in opposition to the attack of Mr. Jevons. Mr. Mahaffy adds: "Mansel is another instance, like Hamilton's, of an enormous but ephemeral reputation. He is never so much as now named among philosophers nowadays." Is not this because Oxford is going over to Hegelianism, which I venture to predict will not have so long a reign as Hamilton and Mill have had in that university? I am glad that Professor Mahaffy has had the courage to state how much a materialistic psychology has been promoted by Mr. Bain by the influence of his school in London being so often appointed examiner in the Indian Civil Service competitions, and thus guiding in a very exclusive way the reading and studies of young men. I notice that Professor Flint, in the papers in 1877 set for the Ferguson Scholarship, puts queries requiring some knowledge of Hobbes, Hume, Comte, Kant, Fichte, and Hegel, but never refers to Hutcheson, Reid, Stewart, or Hamilton.

have large numbers (I know one who has two hundred) studying philosophy under them. Surely this country has a duty to do in beating back the fatal tides. I do not recommend that American youth should, on the one hand, as Professor Mahaffy seems to fear, neglect the philosophy of the past, including that of Kant, or that on the other hand they should overlook physiological research ; but whatever they call in to aid, let them rear the American philosophy by a careful inductive method on the facts of our mental constitution.

JAMES MCCOSH.

## PHYSIOLOGICAL METAPHYSICS; OR, THE APO- THEOSIS OF SCIENCE BY SUICIDE.

### A PHILOSOPHICAL MEDITATION.

THE phrase Physiological Metaphysics is selected simply for precision, because no other expresses our meaning so well. We do not intend by it any single or special science, as when we speak of the science of mechanics, or optics, or chemistry, or geology, or of any other subject-matter, whether physical or psychical. Nor do we use the word collectively for the systematized or interpreted knowledge of several classes of objects, as when modern science is spoken of, and usually though improperly made to include only those sciences which have matter for their sphere. We believe most fervently in science, in each and all of these senses; we rejoice in its progress; we confide in its methods, and are not afraid of the direct or indirect results of any of its discoveries concerning man, the universe, or God. We loyally accord to it independence and supreme authority within its sphere.

Nor do we intend by it physiological science, or that science which has life and living beings for its sphere of inquiry. This science we delight in, most of all the sciences of nature, for the reason that the scientific study of life is the best preparation for and the best introduction to the study of the soul, inasmuch as it effectually disciplines man to do justice to psychical phenomena and all the beliefs and relations which they involve, by first confronting him with the mysteries of life, and then introducing him to those higher phenomena of conscious experience and activity from which these are yet sharply distinguished.

We would not be suspected for a moment, by the use of this

phrase, of throwing any discredit upon metaphysics proper ; which term and the science which it designates both need all the good words which can be said of them in the evil days of criticism and disesteem on which they have fallen in many so-called scientific circles.

We believe in metaphysics or philosophy, both in the narrow and the enlarged conceptions of the same, whether the words signify the conceptions and principles which must be assumed as the foundations of every special science, or whether they stand for a still more extensive sphere of truths concerning man, nature, space, time, and God, which are partly necessary and partly inductive. We would not therefore be understood as calling in question metaphysics as such, or of availing ourselves of any general disesteem in which the term is often used to the damage of that form of speculation which we have in mind, and which we call metaphysics by eminence.

Our theme is physiological metaphysics. We call this science metaphysics because it proposes a system of ultimate formulæ for the explanation of the origin and history of the universe, which it uses as the clue to our scientific knowledge of the same. We call it physiological because the special science of physiology has furnished its distinctive conceptions and principles, and fixed its terminology. Its representatives and defenders have stigmatized much of the current metaphysics as theological, on the assumption that in some sense it had illegitimately borrowed its principles and methods from positive or Christian theology. With much greater propriety we may use the phrase physiological metaphysics as a system in which physiological relations are made supreme, and for which to a large extent they have furnished the terminology. We do not object to the recognition of physiological conceptions in the domain of metaphysics. Every science, so far as its subject-matter is unique, and furnishes conceptions and relations that are peculiar to itself, must have what we may relatively call a metaphysics of its own. Accordingly, we speak with entire precision and propriety of a mathematical, a chemical, and a physiological metaphysics. Used in this sense the term has a legitimate significance. Nor do we in the least except against the recognition of development or evolution as a legitimate conception or law in

any class or sphere of phenomena, so far as its presence and agency are sustained by observation or verified by experiment. The true philosopher will as rationally and as readily believe in development or evolution either as a force or a law as he will believe in mechanical adhesion or chemical combinations, or the laws which govern either. He will not even object to the explication of any number of phenomena by means of evolution, provided the evidence for this application is satisfactory and the experiments are decisive. Nor will he object to relying on analogy as a ground of believing in evolution beyond the range of observation or experiment, provided the data of facts are sufficiently numerous, and the analogies compel to this sole conclusion.

It is only when *evolution* or development is taken out of its definite and legitimate applications within the domain of life, and extended to every description of beings and phenomena, from the inorganic on the one hand to the self-existent on the other, that we question the warrant for applying the relation so widely and to a subject-matter from which it is wholly foreign. That a form of metaphysics is current, which in the sense defined may properly be called physiological, cannot be questioned by any person who is superficially acquainted with the philosophizing of our times. Its growth has been rapid and its development has been, to use its own favorite term, almost as sudden as was the first rushing of star-dust into the first solid orb. The elements of which it is composed are singularly incongruous, and the writers who have contributed to its popularity and its acceptance are strangely unlike. Some of the principles and philosophies which it has contrived to subdue to its own vital power are seemingly irreconcilable, and yet they all have been gathered somehow into a common school of thought, which is regarded by many as mechanical, materialistic, and atheistic on the one hand, while it claims on the other to do full justice to the phenomena of spirit and the mystery of the Infinite. The menstruum which it employs as a solvent for these apparently unrelated and intractable elements, is its doctrine of life. Whatever may be the defects or incongruities of this bold and sweeping theory, whatever are the dangers it brings to faith and morals, to social order and religion, it hides in part by the

elevated associations which the mystery of life never fails to suggest. Development and evolution have become terms convenient for the enchanter or juggler to conjure with in the haunted caves of metaphysical subtlety ; and it would seem at times as though, whether it be enchantment or jugglery, the first victim of either is usually the operator himself.

The writers who have most effectually contributed to the maturity and exposition of this system are Mill the father and Mill the son, Alexander Bain, John Tyndall, Thomas H. Huxley, Erasmus Darwin, Herbert Spencer, George H. Lewes, and John Fiske.

Besides these we ought not to overlook the crowd of naturalists, both the solid and romantic, who, having accepted the evidence for evolution within certain limits, are ready to extend it indefinitely over all regions of knowledge that are unfamiliar to themselves or in their nature not easily grasped, and are content to make it the substitute for the absolute, the infinite, and the living God. Were we to assign to each of these writers we have named the element which he has contributed to this new metaphysics and the agency which he excited, we must needs write a careful criticism and a philosophical history of the theories of each of these eminent men. It will be enough to say that James Mill's bald and yet half-digested sensationalism ; John Stuart Mill's exposition of induction, his Comtian theory of causality, together with his necessitarian and sociological ethics, and his doctrine of associationalism as contained in his criticism of Hamilton ; Alexander Bain's gross physiological cerebralism, and his thorough-paced associationalism, in which he surpasses even Stuart Mill himself ; Thomas H. Huxley's doctrine of protoplasm as the physical basis of life ; Michael Faraday's brilliant suggestion of the correlation of force, confirmed by numerous experiments on the part of careful followers, which has been so brilliantly expounded and so daringly applied by the eloquent John Tyndall ; Charles Darwin's doctrine of the origination of species by the law of natural selection under the conditions of a favorable or hostile environment, and his doctrine of heredity as subsequently enounced ; Herschel and Laplace's nebular hypothesis ; the Kantian doctrine of the relativity of knowledge as interpreted by Hamilton and applied by Mansel—were all

more or less distinctly before Mr. Herbert Spencer when he matured the romantic generalization by which he explains the generation of the universe of beings—mechanical, physical, spiritual—under the formula of development or evolution, and assumed for it a steady and continuous progress from the simple to the complex, attended by a constant tendency to integration, which gives relative permanency to its transitory phases. This law he makes to extend to every thing which exists and to every event which occurs ; to beings material, vital, spiritual ; to every occurrence or change which befalls them ; to the gathering of the cosmical masses, and the falling of a sparrow, to the suggestion of every thought, and the inspiration of every emotion. It even holds of the subtle relations which underlie all science, and declares that these are first evolved by manifold experience, then hardened in the brain by the repeated blendings or consentient activities of many brain-cells, and finally transmitted as the necessary forms and regulators of the psychical—*i.e.*, cerebral—activities of subsequent generations. The system thus perfected has been expounded in more or less detail by not a few zealous disciples, who have now and then sought to apply it with greater exactness than their master. It has been accepted in part by some who would hesitate to assent to it as a whole, but who nevertheless confidently reason as though the formula of evolution were the ready solution of many a problem, and find in continuity, heredity, and development the keys which open many a lock. It is not essential to follow it in detail in order to judge of its characteristic peculiarities. We are only concerned to show that the metaphysics which makes such magnificent claims, and in one sense has reached such magnificent proportions, is essentially physiological in its fundamental conceptions. This is distinctly asserted by Mr. Spencer himself.

“ And now let me point out that which really *has* exercised a profound influence over my course of thought. The truth which Harvey’s embryological inquiries first dimly indicated, which was more clearly perceived by Wolff and Goethe, and which was put into a definite shape by Von Baer—the truth that all organic development is a change from a state of homogeneity to a state of heterogeneity—this it is from which very many conclusions which I now hold have indirectly resulted. In *Social Statics* there is everywhere manifested a dominant belief in the evolution of man and of society. There is also manifested the belief that this evolution is in both cases determined by the incidence of conditions—

the actions of circumstances. And there is further, in the sections above referred to, a recognition of the fact that organic and social evolutions conform to the same law. . . . The extension of it to other kinds of phenomena than those of individual and social organization is traceable through successive stages. . . . Afterwards there came the recognition of the need for further limitation of this formula; next the inquiry into those general laws of force from which this universal transformation necessarily results; next the deduction of these from the ultimate law of the persistence of force; next the perception that there is everywhere a process of Dissolution complementary to that of Evolution; and, finally, the determinations of the conditions (specified in the foregoing essay) under which Evolution and Dissolution respectively occur. The filiation of these results is, I think, tolerably manifest. The process has been one of continuous development, set up by the addition of Von Baer's law to a number of ideas that were in harmony with it."<sup>1</sup>

This distinct avowal would decide the question, if any question were possible, that the relations which are characteristic of Spencer's system are prevailingly physiological.

Whether Spencer's view of what life is, and of its genesis and conditions, may not be seriously defective, we shall not at present inquire. Whether he may not have formed an inexact and superficial view of development itself, as held by Goethe and Von Baer, or made an illegitimate and unauthorized application of the term as understood by them, we need not ask. It is enough for us to know that the conception as at present employed was derived from the processes of life, and was originally limited to the sphere of organic existence. While we take Spencer as the representative of the extremest views, we know that multitudes agree with him in holding the physiological metaphysics who would shrink from making so bold an application of the principles which they involve. But we think it not unjust to subject to the same test the principles which they all hold in common.

This system claims to be the apotheosis of science and of philosophy, in that it has brought it to its final culmination and its ultimate possible perfection. As such it asserts that it has invested the universe with the radiance of a single interpreting formula, and has penetrated its darkest abysses with scientific light. It resolves all the phases of its past, tracing them in

<sup>1</sup> *Essay on Reasons for Dissenting from the Philosophy of Comte*, appended to an *Essay on the Classification of the Sciences*. Pp. 46, 47.

order from the beginning when star-dust was found to be moving out of chaos from a rarer to a denser medium, on to the end when all the possible cycles of development having been completed, and every stadium of progressive integration and differentiation having been accomplished, the ultimate particles shall be released from these bonds, when the scene is to shift, and star-dust somehow shall reappear on the arena passing from a rarer to a denser medium, and the cycle of development shall again be renewed.

We do not propose to enter into an extended discussion of this system. We are well aware that the public, for several reasons, are weary of these minute and extended criticisms. Prominent among them is this: that few persons are so familiar with each of the several lines of argument in which lies its strength if it be true, and its weakness if it is false, as to be able to judge of any considerable number. Fewer still are competent to pronounce upon the relation of each part to every other, and the cumulative force of all as they bear upon the grand conclusion. What is within the sphere of each man's specialty he can understand. What is derived from the sphere of another's observation or thought he must take in some sense upon trust. The general similarity between the several relations and facts of the several spheres any man can vaguely appreciate, and hence the generalizations of the theory seem plausible at their first impression, though the impression is vague, and perhaps because it is vague. Meanwhile the confiding student trusts to the brilliant suggestions of the confident theorist and his more confident asseverations. So long as he is in the attitude of a learner, the path is easy; but so soon as he is summoned to the duty of the critic his task is difficult and irksome, because he must of necessity pass judgment upon subject-matters with which he is not familiar, and in respect to which he feels that he is incompetent to act as a judge. That many physiologists should favor a system of philosophy which finds development everywhere is not very surprising. That those who are not physiologists in special should at first hesitate, and know not what to say, and then be dazed by the imposing plausibility of the generalizations which they cannot fully appreciate, and finally relapse into a "silence which is taken for consent," seems at first thought surprising,

but on second thought is altogether natural. Explain the fact as we may, the theory takes captive many a general student and otherwise critical thinker simply because he is unable to reply to the reasonings on many points which are out of the range of his studies. And yet the breadth of the generalizations, the confidence with which they are urged, the nonchalance with which difficulties are surmounted, the vast number of facts which the expounder has at his command, the ease with which he marshals them under groups, and, above all, the mysterious fascination with which the phenomena of growth and change are invested to every imaginative mind—all these account, in part, for the unquestioning acceptance of the theory by many quick-minded thinkers, who would confess themselves altogether disqualified closely to scrutinize its claims. It is obvious that those who, for the reasons given, cannot understand the arguments for, are disqualified to understand the arguments against, and hence special and minute criticisms of these pretentious and portentous theories attract attention from but few.

There is one line of argument, however, which is accessible to every mind. It concerns itself with the relation of this theory to the certainty and the trustworthiness of science itself. If it can be clearly proved that the physiological metaphysics by its own showing is fatal to the authority and trustworthiness of knowledge itself, in all its forms, and especially in the processes and the conditions which are essential to science, it would seem that a system which had claimed for itself, and had seemed to many to be the apotheosis of science, has committed theoretical suicide. It is our purpose to show this by arguments and illustrations which are open to the understanding of any one who is capable of judging of subjects of this kind, or will be likely to be interested in the question. So far as the teachings of this system are concerned with the authority of and trustworthiness of science, they relate to four distinct topics—viz., *the process of knowledge, the agent in knowledge, the conditions of knowledge, and the sphere of knowledge*—whether this last be the finite universe or the something more, called the infinite, the absolute, or God.

(1.) We begin with the process of knowledge, because science as a process is a form of knowing which passes into a

product. It is also, as process and product, one of the highest and noblest. Any view of the process which is seriously defective in any particular must vitiate our conceptions of the product by weakening or destroying the grounds of our confidence in the structure which it builds for us. A fatally defective or inconsistent theory of knowledge must be suicidal to science. It is then a matter of fundamental interest to know what the physiological view of knowledge must be according to the theory of the evolutionists, and what it is defined to be by themselves.

We ask, first, what it must be according to the theory of the evolutionist? We answer it must be a phenomenon resulting from the differentiation and integration of two preceding phenomena—less complex than itself. We may not refer to a knowing agent as its sole originator, because such an agent that exercises the function of certainty and distinguishes it may be the object known from itself, the knowing spirit, is an inadmissible conception. Evolution recognizes no single agent in any process. It requires at least two simpler forms or phenomena, *i.e.*, modes of the unknown and unknowable force. These must interact, as seed and sunshine, as the nucleus and protoplasm, as nerve-cell or stimulant, in such a way as to evolve a *tertium quid* different from and more complex than either. Let us suppose that a phenomenon of this kind, thus evoked by its consenting forces, and sustained in being only so long as they conspire in energy, has reached so high a position of differentiated integration in a happily constituted and thoroughly cultivated brain, as to take the form of a completed theory of evolution. The theory is demonstrated to the mind of an ingenious philosopher. In scientific language, it floats in a delightful equipoise of consilient if not jubilant brain-cells in the roomy head of its forever famous originator. It also finds entrance and makes place for itself in very many other nervous organizations sufficiently differentiated to give it an answering response of favor. As long as these agencies continue in this happy and consentient reaction, the science of evolution is accepted as true. But the progress of development by its own showing can never rest. No more can any process which we commonly call certainty or conviction of truth, the exciting agents which in the vulgar speech men call evidence, but in scientific nomenclature we must call highly

differentiated and compactly integrated nerve-cells, which represent the theory to be received and the responsive molecules which in common speech are unphysiologically supposed to represent a conviction of its truth—neither of these agencies can linger long in the happy condition of equilibrium which they have attained. Under the onward and upward pressure of manifest destiny, they must proceed to other integrations and differentiations which, whether they be beings or phenomena, must be unlike those which have preceded them. That phenomenon which may remain for a while—call it certainty, conviction, knowledge, science—long enough to buoy up the magnificent theory of evolution, according to the theory and under the operation of evolution itself, can have no permanent existence, and of course no final and universal authority. Or if certainty is still accorded to the lower rank of agencies just left behind, the knowledge and the truth, the subjective conviction and the objective reality, may both be superseded by some other combination of agencies which is totally unlike that which has previously come into being. This is no caricature of the theory, but the strictly scientific application of its principles. For according to its teachings every thing is phenomenal, even the function of knowledge itself. Every phenomenon is brought into being and sustained in being, and is what it is as a being, by the consentient action of the agencies which are concerned in its production. Behind every act of knowledge and into every act of knowledge the whole universe of force somehow appears. What the phenomenon is must depend on the character of the agencies from which it is evolved. If the agents change in their so-called constitution, the reactions must change with them. This must be true of all the forms of knowledge from the lowest to the highest. It must be pre-eminently true of the highest as yet attained by man, the knowledge which is science and which gives science.

Should this view of the matter strike any of our readers as singular and strained, it must be because they have not reflected on the reach and import of this theory of evolution when it is applied to the function of knowledge. The function itself, as we know it in our experience, is so totally unlike any thing of this sort that we cannot believe that any theory can

teach so defective a conception of its nature as the one we have described. Or it may be we carry the convictions which we derive from our conscious exercise of the act of knowledge over into our interpretations of the consequences which any theory would logically involve. It must also be confessed that the language and representations of much if not of most of our English psychology give more or less sanction to those views of knowledge which the physiological metaphysics have only carried to an extreme in one direction, which they somehow have thought to correct in the other by introducing from the world of life the more elevating conceptions of development. It is notorious that the drift of English psychology since the time of Hobbes has set very strongly in the direction of the passivity of the mind. The well-known fact that in sense-perception physical agents or objects must act upon the sense organs and the sensorium, in order that the material world may be known and the prominence given to the operations of the passive memory and imagination in the cerebral and associational schools, have sanctioned these gross misconceptions of the nature of knowledge itself. These in turn have prepared the way for theories which conceive the act either as an effect produced by the object known upon the knowing mind—in this reversing the order of nature and of experience, or represent it as a function in which the object and mind coact, the result being the outcome of their conspiring energies, as when the ball follows the diagonal between two impulses at right angles to one other, or as oxygen and hydrogen are developed by union into water. The leading evolutionists who venture any opinions on psychology do not hesitate to avow the grossest explanations of the mental processes which are matters of the commonest experience. Both Mr. Spencer and Mr. Huxley go so far as to accept the doctrine of Hume that the processes of knowledge are best expressed by Hume's "impressions and ideas," and seem to be sublimely unconscious that anybody who presumes to be a philosopher can hesitate to accept these as the last words upon the subject. These gross misconceptions are not relieved from their logical consequences by being clothed in the more attractive garb of development or evolution, which is borrowed from the sphere of life. Especially

if development itself is conceived as a progress from lower to higher potencies of mechanical aggregation, beginning with a crystal and ending with a spirit. Development suggests associations which are elevated and spiritual. For this reason it can be used more readily to dispute and dignify mechanical relations and laws. It suggests the variety, the resources, the beauty, the intelligence, the joy, and the rapture of living beings. It is invested with the associations of mystery, of independence and of self-reliance, which are connected with living beings, even of lower types. These associations serve very largely to explain the otherwise inexplicable fact that evolution, even when it has become atheistic or agnostic in its philosophy, has entered so easily and been entertained so graciously in scientific circles which are high in moral tone and devout in religious aspiration.

It is more than probable that the construction which we have placed upon the evolutionist theory of knowledge as necessarily suicidal to science, will be regarded as forced and unfair. The *reductio ad absurdum* from the logical consequences or consistencies of a definition or theory, though acknowledged to be theoretically just, is often rejected as practically unfair, especially if it can be urged that the advocate of a theory may perhaps not accept the definition or the construction which the critic imposes upon the doctrine which he assails. The defender or looker-on will not unfrequently interpose in the interest of fair play, and insist that the representative of the theory assailed shall be allowed to define and apply his own conceptions. It is always courteous and usually just to concede this claim. In the present instance the demand can be readily met, and the challenge may be most gratefully accepted. We have in his own language the theory of knowledge which is accepted and expounded by the great advocate of physiological metaphysics.

In Herbert Spencer's "Principles of Psychology" (Introd., c. v., vi., vii., part ii., chap. i.), this theory may be found by any person who will use the patience to search out its fragmentary and loosely scattered elements, and carefully adjust them into a coherent whole. At first the concession is made, and as it would seem with astonishing *naïveté*, which almost

wins the heart of the critic, not only that psychical phenomena are known by consciousness or introspection alone, but that science can neither discern nor prove any connection between them and any changes in the organism. After this naïve concession of Mr. Spencer, which sends us to consciousness as the sole and final arbiter of what it is to know, he robs it of all its authority by asserting that even in sensation all that we can know of the relation of the changes in the nervous organism to its related conscious activities must be learned through the light which is thrown upon the operations of evolution in other spheres of being. This is at once to set aside the final testimony of consciousness in respect to the lowest form of knowledge in sense perception, by referring the decision to a metaphysical or physiological theory. It is to set up a theory which professes to be founded on facts that are confessed to have no possible relation to the facts in question, to settle questions of fact and experience which are asserted to be utterly unlike those from which the induction is derived.

What the conclusion is which he reaches from this induction is very clearly though very indirectly stated thus: "Though accumulated observations and experiments have led us by a very indirect series of inferences to the belief that mind and nervous action are the subjective and objective forces of the same thing, we remain utterly incapable of seeing and even of imagining how the two are related" (§ 56, "Principles of Psychology"). This conclusion being reached, the author proceeds to show how they are related in sense perception, *i.e.*, how knowledge may be developed from or expressed in terms of nervous action. "Knowing implies something acted upon and something acting upon it." "That which in the act of knowing is affected by the thing known, must itself be the substance of the mind. The substance of the mind escapes into some new form in recognizing some form under which it has just existed." He then argues that what seem to be the simplest sense perceptions—*i.e.*, alterations of the substance of the mind or subjective phenomena of nervous activity, as of sound, cannot be simple because we speak of their quality, *timbre*, volume, etc., mistaking here an ultimate or indecomposable experience of consciousness for the several relations which it may have to

other experiences or acts. As we cannot find in consciousness the simplest element of this really complex experience, we must look for it elsewhere. We finally find, or conclude, or conjecture, that it must be akin to a simple "nervous shock." We next find or infer that many simple nervous shocks are the essential counterpart or objective side to which the simplest experience of consciousness in sensation corresponds. We conclude, then, that "the nerve pulses and the pulses of feeling clearly answer to one another, and it can scarcely be doubted that they do so throughout." If next we apply to the teachings of chemistry concerning matter in order to gain light as to the way in which these complex pulses of feeling may be accounted for, we find that complex and dissimilar material agencies are produced from various combinations of simple particles, and that in the last analysis the so-called simple substances are built up of various combinations of one primordial form of matter. This leads us to conclude by analogy that "the multitudinous forms of mind known as different feelings may be composed of simpler units of feeling, and even of units fundamentally of one kind." To the objection that this would obliterate and set aside the distinction between mind and matter, the author replies that, as we know nothing of the essence of either, it is of little consequence whether we define the phenomena of matter in terms of mind or the phenomena of mind in terms of matter. Upon this we make the single comment that whether this be so or not, it is of the utmost consequence that that process or operation which we usually call knowledge—the process by which science is built up and upon the trustworthiness and authority of which science depends—should be rightly conceived. If knowledge, when rightly interpreted, is resolved into a series of nervous shocks to which correspond a series of experiences that are felt, we cannot but inquire what meaning or authority is there in the shocks and accompanying feelings that are expressed in the words, "I know by analogy or believe that the doctrine of evolution is true;" or what assurance we have that what we call our present conviction on this subject, which we are informed is rapidly becoming the accepted creed of the present generation, will be retained in the generation that is to come after?

Our misgivings are increased as we follow Mr. Spencer's analysis of knowledge as experienced in consciousness. "The proximate components of mind," he tells us, "are of two broadly contrasted kinds—feelings and the relations between feelings." We accept this without either questioning or criticism, as being the equivalent of the mind's conviction that Mr. Spencer's doctrine of evolution is true—*i.e.*, it apprehends certain conceptions in certain relations—the conceptions being the subject-matter, the relations being the discovered truth or probability of this subject-matter. We are almost overjoyed by the anticipation that we are to learn at last what he thinks of the operations of the higher intellect in discerning relations. It is a commonplace with other philosophers, and pre-eminently with all modern scientists, that the relations of phenomena are all with which science concerns itself; that the higher intelligence is employed solely in discovering and comparing them. We turn over the leaf with eager if not with agitated curiosity, to learn what the physiological metaphysics have to say upon this point. We scarcely pause to notice Spencer's definition of the feeling as giving us the materials between which relations are discerned. We observe in passing, however, that "a feeling, as we here define it, is any portion of consciousness which occupies a place sufficiently large to give it a perceiveable individuality"—*i.e.*, in common speech it is the act of apprehending the minutest element or object that can be distinguished. But what is a relation as of likeness or identity, of causation, or adaptation or end? What and where does the mind find these subtle links of significance by which facts—called feelings by Spencer—are connected together into those combinations and grow into those structures which men call science, chief and noblest of which is the science of sciences, the physiological metaphysics, of which Development is the charmed word? Listen to the answer: "A relation between feelings is, on the contrary, characterized by occupying no appreciable part of consciousness. Take away the terms it unites and it disappears along with them, having no independent place, no individuality of its own. It is true that under an ultimate analysis, *what we call a relation proves to be itself a kind of feeling—the momentary feeling accompanying the transition from one conspicuous feeling to an adjacent conspicuous feeling'*

(§ 65, "Principles of Psychology"). Here we have the key to the physiological metaphysics! The acts of discerning relations, the related objects, and the relations discerned are feelings. The sublime interpretations of the scientific mind, such as Kepler, and Newton, and Davy, and Faraday, and Kirchhoff have now and then achieved, and which have elevated them to such triumphant joy as only befits a moment of divine inspiration, and the analogies which they have discovered and applied—these, physiologically explained, are brief, inappreciable, and yet faintly appreciated emotions in the transitions from one feeling to another. But what is science if it rests on relations which are conceived after this fashion? Let the student of her history who knows what science has done and is now doing, ask whether this chemico-physiological explanation does justice to those acts of sagacious insight by which science has ascended to that lofty seat from which she dares either proudly to dispense with God or confidently yet humbly to read the thoughts of God. Whatever else may be true of the solutions which the physiological metaphysics give of other problems, they furnish no satisfactory explanation of the processes by which science itself has been evolved into being or of the authority by which she commands the assent of mankind.

(2.) Equally unsatisfactory are their representations of the agent of science, whether it be called the human intelligence or the human soul. It would seem as though any satisfactory metaphysics would of necessity exalt the agent of all these achievements to the highest possible position, and accord to it the noblest endowments and capacities. To do this has been the temptation of scientific thinkers in other ages. It has been reserved for the science of our time to show its extremest daring by its attempts to degrade its activities, and to crown that daring by efforts to dishonor or destroy the agent that performs them. It would seem that none but a modern scientist could be moved to sublime delight in looking back upon his individual self as once floating in the whirl of the original fire-mists, or rise to a feeling of exultation in looking forward to himself as flashing in the azure tints which drape a magnificent sunset. Nor have these conceptions of man's spiritual being been confined to the soarings of the scientific imagination. The reason

has also used its utmost refinement of analysis and stretched analogies to the boldest theories in order to reduce the knowing agent to "a physiological expression" or a metaphysical abstraction. It is true that, in order to be successful, it must first avail itself of the mystery and magic which the common mind finds in the processes of life, exalting and magnifying them so high as to make them capable of spiritual functions, and then give both life and spirit a downward plunge by its mechanical theory of nervous shocks. If our readers will assure themselves that this representation is no exaggeration, let them carefully study the representations of the soul as they are reasoned out by Bain, or Spencer, or Lewes, or Fiske. Let them not be imposed on by the apparently candid and considerate admissions which they find in all these writers of the difference between physiological and psychological experiences, nor of the incommensurability of the one with the other. They will find that in the last analysis the so-called psychological experiences are only other names for states of the nervous system which, even in the terms by which they are described, are only removed by the faintest *nuances*, from mechanism and chimism, either in thought or language. As to the mind itself as known to itself, as exercising the authority of judgment or being convinced in certainty, there is not the hint that this is not only essential but conspicuous in the operations of scientific knowledge. The suspicion or conviction that there is or can be an agent that exists or acts in them all, is set aside by the suggestion that mental acts and the agent as known are but fleeting states or phenomena of the unknown force which now appears as a knowable phase of what we call matter, and now as the knowing act of what we call mind, while of the nature of this two-faced force we can know nothing more than is given in these transient phenomena, while the permanent existence of the subject of either is simply the longer persistence of the force which manifests itself through either aspect of these bi-polar phenomena. To reach any scientific conviction would seem to require a mind to be convinced, but this philosophy knows no mind, but only a state that is correlated to a phase of the nervous system which is but another phase of other agents sublimated to or through higher removes of refinement, from the preceding simpler elements, or the simpler phenomena that went before. No

explanation can be given of the plausibility of such a theory except that its theory of the soul is purely physiological. None of these most dextrous word substitutions or subtle interchanges of thought can be accepted as the equivalent for the emphatic assertion of its own being which the soul makes to itself in every step of its knowing, and which it emphasizes more positively the higher it rises in scientific achievement.

(3.) We pass next to the conditions of knowledge in the apprehension of which the physiological metaphysics claims special advantages. It has learned, on the one hand, to recognize the necessity of certain categories which must be assumed as unquestioned and primitive in order that science may be possible, but cannot recognize them as either forms of being or forms of mind, because, according to the physiological theory, beings and mind are varying states or phenomena of the unknown force themselves which are more or less persistent, evolving one another by differences that divide and combinations that unite. There are relations, however, ever recurring, which mix with all our knowing and enter into all our experiences, and which accompany all our beliefs, and are especially conspicuous in the high generalizations of scientific thought. It is true that physiologically conceived, as has already been explained, relations are only feelings, more transient than the feelings between which they are said to exist—*i.e.*, are experienced in the mind's transition from one feeling to another. There are relations between complexes of feelings and also between complexes of relations. These relations, like all other mental experiences, involve certain definite activities of the nervous organism, which, if often repeated, tend to perpetuation. Let it now be supposed that certain relations, as of causation, or time and space, both in their specialized and more general forms, should often be repeated—the molecular condition of the brain must be gradually adjusted accordingly. By the law of heredity the tendencies to these adjustments must pass over into the brains of the succeeding generation. By constant exercise these adjustments would be so fixed as invariably to recur when their appropriate conditions should require, attended by their accompanying psychical experiences, till at last, as the result of the accumulated force of these recurring and inherited experiences, it has become absolutely necessary to the intellectual activity of the

human race as we find it to think under them as accepted categories of scientific knowledge. The physiological origin and character of this theory of the conditions of science are sufficiently obvious. Every element in it is purely physiological—the nervous activity as the counterpart of mental activity ; tendencies often awakened and fixed in the brain by repetition ; heredity by physiological transmission, and unconscious and necessary revival under every possible occasion. We do not assert that the theory, when physiologically viewed, is altogether coherent. Even though we should allow its principal assumptions to pass unquestioned, we do not find that it explains why so few of these relations between complex feelings or complex relations should originally present themselves so frequently as to thrust aside many others—why the relations of time and space or causation should gain any advantage by their frequency, were there not some original necessity that determined them to be frequently and even uniformly present to the discerning mind. But if any such necessity for their frequent occurrence be admitted, then it must have existed before the intermediate action of the physiological agencies that are introduced to explain the permanence and the universality of the categories that have thus become the intellectual outfit of the race. Then again, heredity, while it transmits with strength and certainty, also transmits with tendencies to variation ; and the environment which receives the transmitted legacy of the past also fixes it with some discernible change. But this is contrary to the theory which holds the categories to be axiomatic and permanent.

If, on the other hand, we suppose the theory to be true, the consequences must be fatal to the authority of science itself. We see not why, under the operation of the physiological agencies supposed, new categories must not come into existence which may displace or perhaps contradict those already recognized—nor why any species of so-called relations may not come into being ; nor why, under the operation of the inevitable tendency to change, the entire structure of axiomatic relations which are now accepted should not be outgrown ; nor why, in short, science itself, as we know it, with its space and time, its number and magnitude, its causation and its adaptations, should not finally be dissipated into intellectual star-dust.

It would seem as though any system of metaphysics ought

at least to provide for its own permanence and the solidity of the sciences which rest upon it. But when, instead of this, it supplies the materials and provides for the necessity of its own displacement, we cannot see why it does not commit a deliberate *hari-kari*, with no less certain and dreadful fatality because of the solemn state and heroic dignity with which it inflicts and accepts the final stroke.

One category or axiom is fundamental to the physiological theory which seems especially endangered, and that is the assumption of the law of evolution itself as necessarily permanent. No man should claim to be a philosopher who has not asked himself the question and attempted to answer it, Why do I believe that the law of development which I observe to exist within a limited sphere of living beings, extends through the universe of being, or why do I assume that a mode of operation which has held good for many ages will continue for all the ages, or even has prevailed from the first? The question is not answered satisfactorily by the physiological explanation of our fundamental beliefs. Mr. Spencer does not phrase it in the form which we have adopted, although he does very often concede that the evidence for our acceptance of the theory as universal and all-enduring is to be found in its universal presence and its capacity to explain all observed phenomena. But where this criterion of truth has originated he does not seem to consider. On his own theory it is a chance brain-growth which has become a fixed growth—an axiom of the mind, broad enough to underlie all forms of scientific research, and deep enough to sustain the structure into which they are wrought; but how a conviction so fundamental should have gained convincing power by the simple repetition of its discerned exemplifications, it is not easy to see. But a metaphysics which does not seek to explain our belief in the fixedness of the course of nature can never satisfy a truly scientific mind. Such a system is not enlightened enough to ask all the questions which should suggest themselves to such a mind. It is not surprising that if it fails to ask them with intelligence it should be unable to answer them satisfactorily. So far as it may be said to ask any questions respecting the foundation of our faith in the physiological relation of evolution, it answers by phenomena and analogies that are purely physiological, and even resolves these physiological data into forces and

laws that are purely mechanical, translating our very faith in evolution into the harmonized movements of the brain-cells of the philosopher, and explains the movements of the brain-cells by the mechanical movements of the particles of which they are composed.

(4.) We notice, last of all, that the physiological metaphysics makes no provision for, or recognition of, the sphere of scientific inquiry in its full extent and completeness. There are certain conceptions and relations for the actual presence of which to the mind it can give no account; much less can it explain our beliefs and reasonings in regard to them. If it be conceded that it is adequate to the demands of the finite universe of matter and spirit in that it can mirror its facts and relations by those processes of responsive intelligence which its physiological theories provide, it fails altogether to explain the presence of our ideas of space, time, and God, and their relations to finite beings. That these conceptions are often present to the minds of men cannot be denied. We do not insist that they believe in them as realities. All that we need to assume is that they can and do think of them. The physiological metaphysics can in some sense explain the presence to the mind of finite objects, and their pictures, and their generalized notions, and, after its fashion, of their relations; but it cannot possibly conjure into being any nervous responses, any combinations or reflex actions which shall explain the notion of time or space as unbounded, or of God as self-existent and everywhere knowing and acting. Indeed, unless we greatly misunderstand Mr. Spencer's avowals, he limits the power of human ideation to the capacity to picture a certain extent of finite material, which must break down under its impotent efforts to grasp more than a limited quantum of combined and expanded objects and their relations. He very naturally attempts to dispose of space and time and the infinite by sending them to the limbo of *pseudo-ideas*, but he does not send them so far from the border-line of those thoughts and ideas which bask in the clear sunlight, that they do not now and then obtrude their dusky shadows along the horizon that bounds our every-day human thinking. He rightly judges that he has no place for these ideas in his system, for if all thinking is but the charging and discharging of so much nervous force, or the *dislocation* and *relocation* of so many brain-cells, then it is evident

that there is no apparatus which can picture to man any but finite objects. The physiological metaphysics furnishes no such apparatus, for by its own showing the highest capacity into which the intellect of man can be developed can never rise beyond the actions and reactions of a definite quantum of nervous matter, as it is acted on by a definite quantum of existing stimuli. How can such a mind know space, or time, or God? How can it even think of them? Or how, with the materials which are furnished for it to work upon, can it construct for itself the conceptions of such entities? We are well aware that Spencer, with a *naïveté* that is charming, often breaks from the logical chain which should bind him to his system, and flies and even soars above it, in speculations concerning the mysterious unknown that is symbolized to men by its perpetual approximations to reality, which are doomed ever to change because they must ever fail to do justice to the unreachable and inexpressible truth. We know very well that he represents it as the crowning glory of his system of development, that it satisfies man's belief that there is an unknowable object of longing and worship, and that his conceptions of its nature must be forever changing because inadequate. But we cannot see how, upon his own theory, he finds any place even for the conceptions of what he says cannot be known, for the reason that he makes the very conception impossible. It would seem to us that, in order to know that we cannot know it, we must know what the something is which we cannot know, and for the power to conceive such an entity his theory literally and figuratively provides no place in the human brain. It is doubtless grateful to him now and then to break from the limits of his own principles to contemplate some of the many things in heaven and earth which are *not* dreamed of in his philosophy; but he should never be permitted to stray beyond the inclosure within which he has confined himself lest he impale himself upon some of the stakes with which he has hedged himself about. A philosophy which cannot even think of time, or space, or God, has already doomed itself to self-destruction, however ambitious it may be to settle questions which it has demonstrated its incompetency to entertain.

But we ought to bring our meditation to a close. No phenomenon of modern thinking is more marvellous than the

suddenness with which the physiological metaphysics took form and attracted to itself public attention. It is far more wonderful that it should have been accepted with so little scrutiny, and been assented to with so blind and headlong an allegiance by large classes of men who claim to be little more than laymen in both physiology and philosophy. It is more wonderful still that the attempt to challenge its assumptions and to scrutinize its evidence, especially by philosophers or theologians, should have been resented as bigoted and ignorant intrusions into the domains of pure science, and have fixed the devotees in a more blind and unquestioning faith in the extremest conclusions, or have even determined the sympathy of some towards the most reckless assertions of principles that are grossly inconsistent with religion, morality, and social order.

The doctrine of development in the sphere of life, whether vegetable or animal, is familiar to the experiences of the most superficial student of natural history. The distinct assertion of it in a wider reach and application, after a fixed order or plan, when propounded by modern naturalists, had a highly poetic and even a religious tinge, such as at first made it suspicious in the judgment of sober analysts. Only devout Theists, or mystic Pantheists, or imaginative naturalists, would favorably regard the theory of germs as containing within themselves the promise and potency of so wondrous a life which was waiting to be developed from within, and which, in its turn, held within itself the capacity to produce germs of still greater promise and potency. The extension of development to the production of new species required only a larger faith and a more extensive observation. It was not till the tendency to variation was conceived of as in some sort a mechanical force, and capable of approximative mathematical formulization, of course without warrant, that the theory gained a hearing from the schools. The emphasizing of the influence of environment as coacting rigidly and severely with the tendency to variation, and the addition of the struggle for existence and the survival of the fittest, tended to abate still more of the poetical and religious aspects of simple development. Even then there was no necessary inconsistency with the belief that intelligence originated and controls the operations of life in the individual and the species. Indeed, the

theory rightly viewed, if you take intelligence and spirit out from its domain, supposes a plan and prevision with the amplest resources for combination and selection, and is not inconsistent with the devoutest Theism. The very word development in the minds of most men, and as the unconscious speech of even atheists and naturalists, supposes a plan after which phenomena are evolved to view. Unluckily when the theory and relations were extended across the boundaries of simple life, it was taken up by men who believed that life is only a more complex form of mechanism, and spirit a more complex form of life, who held, moreover, that mechanism rules the universe, and that all its wondrous phenomena, from attraction to thinking and loving, depend simply on the collocations and motions of particles that are by themselves inert, and, compared with one another, are indistinguishable. As soon as this construction was accepted, the poetico-religious theory of development became only a stupid game of permutation and combination. The progress of the universe was as uninteresting and as uninstructive as the evolution of logarithmic indices that are never applied, and, what is worst of all, the system which derived all its plausibility and interest from the phenomena of life provided for its own refutation and abandonment by the suicide to which it was self-doomed. It teaches that the ultimate molecules or simplest forms of matter have not only the capacity for, but they are self-moved to, acts of combining into more complex unions, each of which is capable of phenomena higher in the scale of existence. When the highest forms of the inorganic pass, by insensible gradations, into the lowest forms of life, the higher forms of life begin to put on the lower forms of sentiency and intelligence. It follows by strict necessity that all the spirit of which we are cognizant—all finite spirit, is but some highly developed form of matter. It would seem that a universe like this, with germs like these, endowed with such varied capacities of coaction and development, and certain to proceed with advancing steps through an ascending line of higher possibilities, must require as its supplement and explanation a plan—a thought implying a thinker. We have seen that the logic of the system must exclude even the thought, and makes no provision for the belief of such an agent. The contempt and scorn, however, with which this belief has been rejected by so many

evolutionists can only be pardoned in view of the profound ignorance that teleological views have been held by some of the profoundest philosophers, who have made the most valuable contributions to positive knowledge. It would seem also that, in proportion to the earnestness with which fact and experiment have been insisted on as the only verifications of hypothesis, and the more distinctly mathematical determinations of law have been exacted, the more romantic and gratuitous has been the faith in forces wholly incapable of mathematical promulgation, to which experiments even of the most general character could not possibly be applied. As we follow out the system into other applications, we find that the theories of ethics and politics derived from it are as offensive as the materialism and atheism which it involves or supposes. Perhaps we may say that they are more immediately dangerous and offensive because they are capable of being more directly destructive in their consequences. And yet so generally has literature accepted this physiological philosophy as alone rational and certain that it is assumed by those who know little of physiology that this science of life, as misunderstood and misapplied, is the foundation for and introduction to ethical and political philosophy. That the science of man in his actual nature and in all his capacities is the proper introduction to ethics and politics is true, but this is quite another thing than that the sense of duty and the recognition of right are the products of social interactions, and are resolved into the conceptions of interest which have been developed by a brutal struggle for supremacy, and wrought into the brain by the manifold repetitions of force, prompted by the selfish and sensual desires which were the only impulses by which man was originally moved.

We must own that it is somewhat surprising that any protest against such a system which is founded on its practical tendencies should be resented so sensitively by a certain and a large class of critics as necessarily proceeding from theological traditions or prejudices.

We are more surprised that the learned presidents of academies of science are sometimes more anxious to avow their adhesion to the doctrine of evolution than to state in which of its many senses they understand and accept it. Or is it possible that they do not understand that there is a theory of develop-

ment which not only consists with the belief in thought and a plan in the history of the universe, but requires for its beginnings an intelligent and interpreting spirit in man as truly as it does an originating and sustaining spirit in God? Is it possible that they can be so ignorant as not to know that evolution does not necessarily mean a blind force acting by mathematical laws, which of themselves are the products of highly sublimated star-dust, according to a law of progression which is itself prescribed and assented to by other phenomena somewhat more persistent than the rest, and whose attenuated skeleton of materialism is made to seem plethoric and buoyant by fine feathers like heredity, development, differentiation, and integration, some of which are not yet legitimized by definition or verification, and others of which are confessedly borrowed from a philosophy that is as mathematical and analytic on the one hand as it is poetic and devout on the other? We would also express our surprise that these leaders of scientific opinion who happen to have the reputation of believing in such spiritual agencies in the universe as man and God, should deem it necessary so carefully on scientific occasions to affirm that science concerns itself only with the laws of nature and the phenomena which these laws explain, and never care to inquire whether spirit is not as truly an agent in nature as matter, and whether, both as created and creator, it may not determine phenomena without violating law and order in the universe. We know that theologians and metaphysicians are foolishly sensitive and meddling, and that they are alarmed by uncommon phrases, but we see no reason why, because a man is a scientist, he should have so many negative protests for theistic theologians, and so few for atheistic materialists, who in their way are equally blind and romantic in their fondness for high-sounding phraseology.

But what surprises us most of all, is that the logic of the system itself has not oftener been scrutinized and more decidedly rejected by scientists. Surely there is a difference between vague and distant affinities and significant likenesses, between analogies that compel and so-called analogies that exclude conviction. It would seem that science ought to be as sensitive to unlikeness in phenomena as to likeness, and more than all should be foremost to declare that a metaphysics which

destroys itself by its own logic, and every science which it ought to sustain and account for, ought by common consent to be relegated at once to the limbo of the many speculations which have died by their own hands.

P.S. The preceding meditation, if it has served no other purpose, may have made conspicuous the difficulty of treating in a popular manner a subject, the fundamental conceptions of which are liable to vagueness of use and diversity of interpretation. In view of this liability, the writer subjoins a brief sketch of the history of the terms evolution and development in modern science, which, since writing the above, he finds in R. Euckens' *Geschichte und Kritik der Grundbegriffe der Gegenwart*, Leipzig, 1878.

*Explicatio* first appears interchangeably with *evolutio* in Nicolas of Cusa, but used in a real and not simply a logical application. Kepler applies it to the production of thoughts as well as things. Development—Germ., *Entwicklung*, in the modern application or proximately—is used occasionally by Kant in his early writings. Through Herder, with whom it took the modern definite meaning, and was a favorite word, and Tetius, it was adopted into general use, and has now become almost trite. The term development, strictly construed, did not at first correspond to the modern acceptation. Originally it supposed an outfit of properties and powers, which are unfolded in process of time. The modern use supposes the fitting out or providing the subject with powers to be itself the product of development, carrying us back to certain fundamental powers from which these secondary capacities proceed.

This genetic interpretation was well known to the Greeks, pre-eminently to Aristotle, who, following Plato, makes the whole to precede the parts, the type determining by its presence and agency their formation and working. This view remained current through later antiquity, the early Christian times, and the middle ages, with here and there an exception. It was not, however, till modern philosophy taught us to comprehend being by means of causation that the genetic method of defining and explaining phenomena was introduced. This explained how analysis into elements, conceived as living powers, gives at once the historical progress and the philosophical explanation of

events. But the first in time is not necessarily the simplest and the ultimate, and development by tracing the historical order is still obliged to ask what is developed, and how and to what—that is, it must go back to causes and their results.

Nor may we overlook the fact that the genetic method may be applied in every one of the significations which development both as term and conception has assumed in modern philosophy. These are many. On the one side, the universe is made to come from a single ground-force; on the other, several are assumed as necessary. One holds to matter as the beginning, another to spirit; one proceeds from unity to multiplicity, another from the simple to the complex; one makes it a formation from within outwards, another a superposition from without. The one class of tendencies begins with Nicolas of Cusa and culminates with Hegel, who develops all forms of being by the movement of the concept; the other begins, as it were, with Descartes and ends with Darwin, which last theory has in some circles almost appropriated the conception of the word development in his own special interpretation. The term without qualification should be avoided as involving confusion and vagueness of thought. Or if we give to it a definite meaning, we must interpret it in the sense of some special theory.

The Darwinian theory knows nothing of inward dispositions or tendencies. Its strength lies in the definiteness with which it states its elements or forces, and its entire rejection of all inner agencies, but its weakness lies in the obligation which it assumes to explain phenomena in causal as well as in historical relations. To do this successfully it must give the laws of the workings of its cause, and as it only knows mechanical laws it often is unable to do this. The next difficulty is to account for the permanence of these effects in sustained forms of being, under the coaction of so many counteracting and coacting causal agencies. To fall back on simple heredity is to fasten to nothing, and to fail to see that this includes all these difficulties within itself. To fail to regard permanent forms as effects to be accounted for is to give up the most important problem of all, and to be content with elements only, and to abandon that with which development has to do by the wonderful complication of the universe as it is at present. All these difficulties gather strength, the wider and more varied is the field which is covered,

especially when as now this method is applied to the sphere of spirit. Doubtless it has thrown some light upon some of its phenomena, but to spiritual phenomena it is most misleading when it assumes to judge wholly by material analogies. Especially would it be to assume that all which the spirit has or does comes to it from without. Great ingenuity has been expended in the attempt to show how this is possible—e.g., how customary combinations can be fixed as permanent laws, how the instinct of self-preservation has been transformed into a moral law. Against all these ingenious explanations we should ask whether the method itself were not inconceivable and self-destructive? What conception can we have of a soul with no powers of its own? Can there be an effect without a counter-working? We can escape these difficulties only by simple materialism; but this brings difficulties of its own. If we believe in spirit we cannot escape original tendencies. If we resort to custom we must assume an original capacity for habit as a causal force acting under law. Similarly with judgments of worth. We gain nothing by resorting to the unconscious except to solve a problem by getting rid of it. We gain nothing by analyzing phenomena into minute elements; for the question returns, How are the ultimate elements endowed, and what can they effect? If we deny original activity working according to law to the spiritual life, we must deny all permanent truths, and with it the causal force of the genetic method itself. With these denials goes the denial of science itself. It were ridiculous to concern ourselves with the problems of reason, after reason were banished from the world. The whole force of modern thought has arrayed itself against this materialistic sophistry—prominently, Kant and Goethe: Kant has opposed to false analysis the true by showing that an original spiritual activity must be assumed, to render it possible to hold anything to be simple and ultimate; Goethe in a memorable passage in his correspondence with Schiller, against that class of Frenchmen who think a whole is explained by the division of its analyzed parts. It follows from all this, that the doctrine of development is full of blessing or of bane, according to the presence or absence of other fundamental conceptions and relations.

NOAH PORTER.











